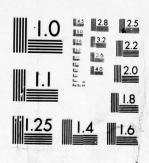
ARMY DUGWAY PROVING GROUND UTAH
TURBULENCE MEASUREMENTS ON A FORTY-EIGHT METER TOWER IN DESERT --ETC(U)
OCT 77 A W WALDRON AD-A049 036 NL UNCLASSIFIED | OF.5 AD A049036

Br BB

OF

# AD A049036



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-4.

DDC FILE COPY

TURBULENCE MEASUREMENTS

ON A FORTY-EIGHT METER TOWER IN DESERT TERRAIN

DATA REPORT. 1476-8 APT C
BY

ALBERT W. WALDRON

OCT. 277

12) 4880.

U.S. ARMY DUGWAY PROVING GROUND Dugway, Utah 84022

APPROVED FOR PUBLIC RELEASE: DISTRIBUTION UNLIMITED

118150

REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER TECOM Project No. 2-CO-403-000-054	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) TURBULENCE MEASUREMENTS ON A FORTY-EIGHT METER TOWER IN DESERT TERRAIN	5. TYPE OF REPORT & PERIOD COVERED Data Report, February 14 - April 8, 1977 6. PERFORMING ORG. REPORT NUMBER
ALBERT W. WALDRON, JR.	8. CONTRACT OR GRANT NUMBER(*)  RDTE Project No.  1T162111AH71-A5
U.S. Army Dugway Proving Ground, Dugway, UT 84022	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
U.S. Army Dugway Proving Ground, Dugway, UT 84022	12. REPORT DATE October 1977  13. NUMBER OF PAGES 441
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office)	15. SECURITY CLASS. (of this report)  15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)	Carll .
Approved for public release; distribution unlimited	

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

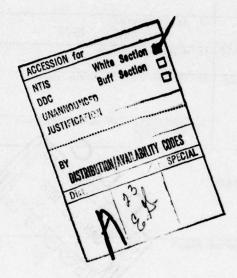
Bulk Richardson's number, critical Richardson's number, mixing height, Monin-Obukhov length scale, planetary boundary layer, rawinsonde data, similarity theory, steady-state, surface boundary layer, turbulence measurements.

20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This is a data report for which turbulence, wind and temperature profiles were collected on a 48 m tower for 10 minute periods every data collection hour. Net radiation measurements were made and averaged for half hour periods every hour. Salt Lake City rawinsondes were collected at 0500 and 1700 hours local time. Dugway West Vertical Grid morning rawinsondes and afternoon 10 gram pilot balloon soundings were collected daily. The tower and net radiometer data were collected at Dugway West Vertical Grid every successful data collection hour of the day between 0900 Monday and 1500 Friday for an 8 week

DD 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE 1

UNCLASSIFIED

period, February 14 through April 8, 1977. All tower data were smoothed. Both observed and smoothed data are reproduced. Calculation of stability parameters; Richardson's number, Monin-Obukhov length scale and bulk Richardson's number are prepared for four layers. Friction velocity is calculated for the lowest three layers. Power law exponents are calculated for wind speed and turbulence. Approximately 50 percent of the data are associated with 8 m wind speeds of 3 m/s or more and are suitable for classical profile analysis. Known universal methods of data analysis are presented. Pasquill stability categories for these data are tabulated.



ERRATA: Turbulence Measurements on a Forty-eight Meter Tower in Desert Terrain, Appendix A

						_	Set Co	204 61	Fi + + 2 d	£		
Page A-5	Lime 1600	₹:-	ᆈ,	Heigh SIGA	Height, m SIGA (DEG)	4.8	2/8	7.9	8 7.2	1 2 4 8 16 9.5 8.7 7.9 7.2 6.6	6.0	48 5.7
A-5	1700	22	•	SIGA	SIGA (DEG)	8.0	8.9	5.9	5.0	4.3	3.7	3.4
A-5	1800	03	•	SIGA	SIGA (DEG)	22.9	22.5	22.1	21.7	22.9 22.5 22.1 21.7 21.3	20.9	20.7
A-28	1200	08	,									
A-29	1300	90										
A-101	0800	19	72									
A-106	0100	37	25									

# TABLE OF CONTENTS

# SECTION 1. SUMMARY

		Page
1.1	BACKGROUND	1
1.2	PURPOSE	2
1.3	DESCRIPTION AND SCOPE OF REPORT	2
1.4	SUMMARY OF RESULTS	4
1.5	CONCLUSIONS	4
1.6	RECOMMENDATIONS	5
	SECTION 2. DETAILS OF THE REPORT	
2.1	TEST OBJECTIVES	6
2.2	LITERATURE REVIEW	6
2.3	EXPERIMENT DETAILS	7
2.4	DEPTH OF THE MIXING LAYER	16
2.5	UNIVERSAL METHODS OF ESTIMATING VERTICAL AND HORIZONTAL TURBULENCE	16
2.6	PASQUILL STABILITY CATEGORIES FOR THE OBSERVED TOWER DATA	18
2.7	DATA PRESENTATION	18
	SECTION 3. APPENDICES	
Α.	FORTY-EIGHT METER TOWER DATA, DUGWAY PROVING GROUND .	A-1
В.	RAWINSONDE AND PILOT BALLOON DATA, DUGWAY PROVING GROUND	B-1
C.	SPECIAL RAWINSONDE AND PILOT BALLOON DATA, DUGWAY PROVING	C-1
D.	RAWINSONDE DATA, SALT LAKE CITY	D-1
Ε.	REFERENCES	E-1
F.	DISTRIBUTION LIST	F-1

# LIST OF FIGURES

Figure			Page
1.	Dugway West Vertical 48 m Tower Site		. 9
2.	Ground Plan of West Vertical Grid 48m Tower Site		. 10
3.	West Vertical Tower Instrumentation		. 12

# LIST OF TABLES

Table		Page
1.	Instrument Characteristics	13
2.	Net Radiation Index	19
3.	Pasquill Stability Category as a Function of Net Radiation Index and Wind Speed	19
4.	Pasquill Stability Categories for the Dugway West Vertical 48 m Tower Site	20

#### 1.1 BACKGROUND

The Pasquill stability categories are used to estimate atmospheric diffusion. The categories are associated with vertical and horizontal aerosol cloud standard deviations at 100 m and their rate of change beyond 100 m. Estimates of the Pasquill category can be made from measured values of turbulence, vertical temperature gradient and wind speed; or, time of day, season, cloud cover and 10 m wind speed as presented by Turner (1). The last method is popular since it requires equipment for measurement of wind speed only. Use of this method, however, is dependent on site characteristics. A further requirement is a steady-state condition in the surface boundary layer. First inspection of the data indicates that this condition tends to occur only with 10 m wind speeds of 3 m/s or more. There have been few studies of what to expect when wind speeds at 10 m are less than 3 m/s. At times steady-state occurs for wind speeds less than 3 m/s and the Pasquill category method can be used. Also, the basis of site dependence has not been clearly spelled out. Surface roughness is one control. Surface albedo and moisture content are two more. Net radiometer measurements can be used to estimate the integrated effects of insolation, radiation, reflection and absorption. Vertical turbulence  $(\sigma_{\rm F})$  can be related to vertical temperature gradient and wind speed (2,3)Horizontal turbulence ( $\sigma_{\mathbf{A}}$ ) is related to the same parameters plus depth of the mixing layer (4). Net radiometer and wind speed measurements can be used to estimate vertical temperature gradient (5).

The depth of the mixing layer controls the extent of vertical cloud growth. National Weather Service rawinsondes are used to estimate this height from the 0500 MST morning rawinsonde and the predicted maximum temperature. The afternoon rawinsonde, taken 12 hours later, can be used to verify the morning prediction. A recent study  $^{14J}$  of daytime values of  $\sigma_{\Delta}$  showed a relationship between  $\sigma_{\Delta}$  and the depth of the mixing layer as

indicated by the lowest temperature inversion. The extent to which the National Weather Service rawinsondes can be used to describe conditions over the adjacent countryside remains to be seen. This would be important for Dugway since rawinsondes are not routinely taken here.

#### 1.2 PURPOSE

The first purpose of this report is to present data collected at Dugway Proving Ground which will make it possible to determine the degree to which it is practical to use the Turner  $^{(1)}$  basis of estimating the Pasquill stability categories. Measurements of  $\sigma_{\text{A}}$  and  $\sigma_{\text{E}}$  are precise. The Turner basis of estimating turbulence is less so.

The second purpose is to present the data in a form which facilitates comparisons between turbulence measurements and the other measured parameters; i.e., Richardson's number (Ri), bulk Richardson's number (BU), Monin-Obukhov length scale (L), wind speed, friction velocity  $(u_{\star})$ , solar angle, net radiation, cloud cover and mixing layer depth  $(h_{m})$ .

The third purpose is to present data which makes a comparative study of  $h_{\rm m}$  possible. Dugway and Salt Lake City rawinsonde data are included for that purpose.

The fourth purpose is to present data which can be used to determine the minimum amount of data needed to accurately estimate diffusion and the degree to which it is practical to use the Pasquill stability category method.

#### 1.3 DESCRIPTION AND SCOPE OF REPORT

Turbulence, wind and temperature profiles were collected on a 48 m tower for 10 minute periods every data collection hour. Net radiation measurements were averaged for half hour periods every hour. Salt Lake City rawinsondes were collected for 0500 and 1700 hours local time. Dugway West Vertical Grid morning rawinsondes and afternoon 10 gram pilot balloon soundings were collected daily. There were 37 data collection days on which tower data were collected to make a total of 578 10-minute

periods. The eight week collection period started February 14 and ended April 8, 1977. Data were collected from 0900 Monday through 1500 Friday each week. Due to power failures and instrument system malfunction, the 578 periods represent 69.5 percent of the desired data. Dugway West Vertical morning rawinsondes were taken 35 of the 37 days. Afternoon pilot balloon soundings were taken 36 of the 37 days. Additional special Dugway West Vertical rawinsondes were taken every three hours on part of four days and all of one day. Pilot balloon soundings were taken between rawinsondes. The purpose of collecting the three hourly rawinsonde data was to make it possible to follow the change of mixing layer depth through the day. An additional eight afternoon or evening rawinsondes were taken and can be used to determine the actual Dugway afternoon mixing layer depth. After March second, a shortage of army meteorology team rawinsonde operators made it impractical to collect both morning and afternoon rawinsondes on a routine basis. Salt Lake City rawinsonde data were collected twice daily (at 0500 and 1700) for all 37 data collection days.

Surface observations of cloud cover and height, visibility, temperature, dew point and present weather were taken at the Dugway Army weather station, 21.5 km east-southeast of the West Vertical Tower.

Methodology for relating the various measured parameters has been demonstrated by Panofsky<sup>(4)</sup> and Waldron<sup>(5)</sup>. Some of that methodology will be presented here.

All tower data are smoothed. Both observed and smoothed data are reproduced. Calculation of the stability parameters; Richardson's number, L, and BU are prepared from smoothed data for the lowest three layers, Ri is also prepared from observed data for the highest layer. Occasionally, when wind speeds do not increase with height to 48 m, the above numbers are calculated from observed data through the height of the maximum wind speed. Power law exponents are calculated for wind speed and turbulence using the smoothed data.

A comparison of  $h_m$  measurements at Salt Lake airport and at the Dugway West Vertical tower site will indicate the possibility of substituting Salt Lake for Dugway estimates of  $h_m$ .

Methods of calculating turbulence from dimensionless derived data are reviewed. The best of these are applicable to all \*ites and are designated as universal.

Pasquill stability categories for the observed tower data are calculated and tabulated.

#### 1.4 SUMMARY OF RESULTS

Approximately 50 percent of the data collected were associated with 8 m wind speeds of 3 m/s or more and are suitable for classical profile analysis techniques. Eight percent of these data are incomplete due to the effect of precipitation on the temperature measurements.

#### 1.5 CONCLUSIONS

A preliminary scan of the data indicates that 50 percent of it is suitable for the Pasquill stability category treatment. Light-wind data will require a different treatment.

Presentation of the parameters from which expected turbulence values can be derived was straightforward except for times when the positive Richardson's number was too large to be meaningful. It is possible that BU can be substituted for Ri in these cases.

Precise use of rawinsonde data may require a different technique; i.e., use of slow-rise balloons, in order to obtain the required temperature profile resolution.

Analysis of these data will determine whether or not simpler, less expensive measurements can be substituted for turbulence measurements at the West Vertical tower site. It appears that, for low wind speeds, there is no adequate substitute for direct measurements of turbulence.

The collection of cloud cover and net radiation data was completely successful. Further analysis will determine the usefulness of these data.

#### 1.6 RECOMMENDATIONS

It is recommended that a straightforward analysis of the suitable data be performed in an effort to see whether the universal formulae apply. For nighttime  $\sigma_E$  data and for all  $\sigma_A$  data, it may be necessary to develop empirical relations which are dependent on the site. Light wind speed data require special treatment to determine whether any pattern can be discovered.

The observed afternoon mixing layer depth at Salt Lake City can be compared to Dugway wind-aloft data. The possibility of estimating  $\sigma_A$  at the West Vertical tower with the help of this mixing layer depth should be examined.

Preceding Page BLank - FILMED

# SECTION 2. DETAILS OF THE REPORT

#### 2.1 TEST OBJECTIVES

- a. To initiate a data base which will make it possible to relate wind speed and temperature profile data to measured turbulence values at a desert site.
- b. To obtain data which can be used as a basis of estimating the depth of the local mixing layer.
- c. To obtain combined cloud cover and net radiation data which can be used to evaluate the Turner basis of determining the appropriate Pasquill stability category.

#### 2.2 LITERATURE REVIEW

Most of the past data collection reports for other sites have concentrated on the lowest 16 to 32 m. Few of the reports have included all of the data considered necessary for analysis of turbulence in the surface boundary layer. One of the most complete reports which included observations of turbulence, wind speed and temperature profiles, net radiation, cloud cover and rawin reports was the 1957 Great Plains report (6). Rawin wind speed and direction were measured to 2000 m every two hours. No temperature profiles were measured above 16 m. The mixing layer concept was not considered. The measured turbulence values were not very accurate. A more recent effort was conducted in Kansas during the summer of 1968<sup>(7)</sup>. The tower height was 32 m. Turbulence measurements were excellent. The instruments used were sonic anemometers. There were no rawinsonde measurements, no surface observations and no net radiation measurements in the published Kansas data report<sup>(7)</sup>. An interpretation of these data in terms of Pasquill stability categories can be seen in a DPG report (5). The Wangara data report (8) included 16 m tower wind and temperature profile data, surface observations and Funk net radiometer measurements, but no turbulence data. A 1971 White Sands (9) report included measurements on nine poles of temperature profiles, wind speed profiles and turbulence.

No measurements were made of cloud cover, mixing layer depth or net radiation. In September 1973<sup>(10)</sup>, 11 daytime collection periods were conducted in Minnesota. These data included measurements of turbulence, wind speed, wind direction and temperature on a 32 m tower, as well as similar measurements on a balloon cable up to a maximum height of 1219 m. Slow-rise rawinsondes were taken to supplement the other data and to determine the top of the mixing layer. The skies were clear and there was a temperature inversion on every rawinsonde run to indicate the top of the mixing layer. No net-radiation measurements were taken.

#### 2.3 EXPERIMENT DETAILS

#### 2.3.1 The Site

The Dugway West Vertical 48 m tower site is located in relatively flat terrain. Variations of the desert area elevations are less than 40 m. This flat area extends 50 km in the northwest quadrant. Nine km to the southwest there is a mountain ridge oriented in a north to south direction and rising to 2131 m. Nineteen km to the southeast is a ridge which rises to 1700 m. An extensive mountain range to the northeast is 19 km away and rises to a maximum height of 2100 m along a 64 km north-south line (see Figure 1). The elevation of the tower base is 1311 m. Grey Molly is the primary vegetation in the vicinity of the tower. Grey Molly is a desert shrub having a height of 7 to 30 cm and spaced at one-half to one m intervals.

In summary there is a 5 km uniform fetch in the northwest quadrant and a minimum 9 km uniform fetch in the other quadrants. Forty-one m southwest of the tower is an electronic satellite which is 2.4 m wide, 2.7 m long and 2.4 m high. See Figure 2 for a ground plan of the site. The tower site as shown in Figure 1 passes the micrometeorological test of uniform terrain in all directions to a distance equal to 100 times the tower height. The ADAS electronic sattelite is an exception and can be expected to affect roughness height  $(z_0)$  and turbulence values for winds

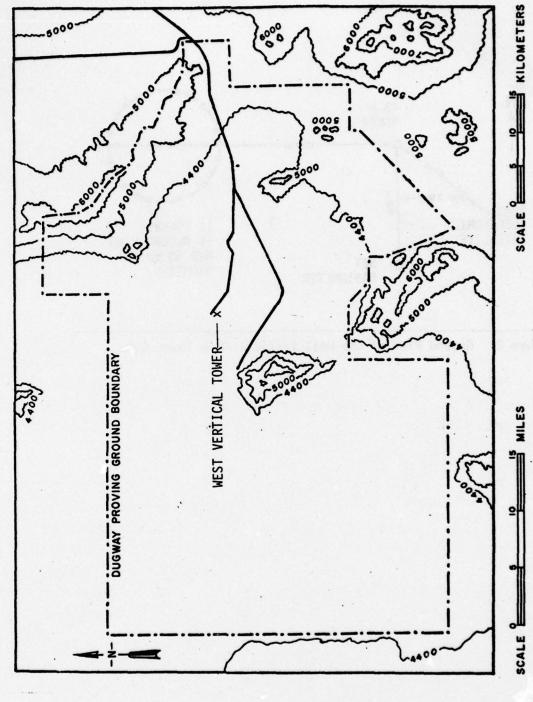


Figure 1. Dugway West Vertical 48 m Tower Site (Elevations in feet)

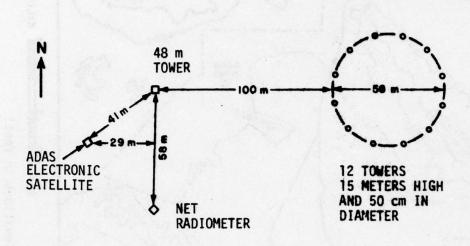


Figure 2. Ground Plan of the West Vertical 48 m Tower Site

from the southwest. The 12 towers to the east shown in Figure 2 should have a negligible effect on winds from the east.

A description of the Salt Lake City airport where the National Weather Service rawinsonde is taken is omitted here since only a comparison of mixing layer heights is involved. The comparability of Dugway West Vertical and Salt Lake City estimates of the mixing layer depth will be examined in this report.

# 2.3.2 Instrumentation

Turbulence measurements were made with four Climet model 014-47 or 014-48 bivanes mounted at 8, 16, 32 and 48 m. Horizontal turbulence measurements at 2 and 4 m were made with Climet 014-6 direction vanes. Wind speeds were measured with Climet cups, model number 014-102, mounted at 2, 4, 8, 16, 32 and 48 m. Temperature was measured by aspirated 015-3 Climet thermistors having an accuracy of plus or minus 0.150 C. Instrument characteristics are listed in Table 1. The instrument tower dimensions were 1.2 m by 1.8 m with the long dimension on a north-south line. The instrument arms projected east 2.1 m from the south side of the tower. Wind speed cups were placed at the outer end of the arm. Wind vanes were mounted 0.61 m from the outer end. Aspirator tubes for the thermistors were mounted on the northeast corner of the tower with the aspirator opening facing north. See Figure 3 for details of the tower instrumentation. The net radiometer was placed on a one m post 58 m south of the tower. The data were collected on tape at the site, using the Climet Miniature Data Acquisition System CI-150 (MINIDAS). The tape was changed manually once a day and prepared for reduction by a UNIVAC 1108 computer.

A Gier and Dunkle type net radiometer manufactured by Teledyne Geotech.



Figure 3. West Vertical Tower Instrumentation

# 2.3.3 Data Reduction

a. Observed Data. Bivane data at 4 and 8 m were collected 10 times per second. All other data were collected once per second. Data reduction of tower data was for a 10 minute period starting at the hour. Net

Table 1. Instrument Characteristics

Characteristics	Direction Vane	, Bivane	Wind Speed Cups
Threshold, m/s	0.33	0.33	0.27
Damping ratio	0.4	0.55	
Distance Constant, m	1.00	0.95	1.52

radiometer data were averaged for a one-half hour period centered at five minutes past the hour. Ten-minute means and instantaneous data were used to calculate the standard deviations of vertical and horizontal vane angles.

# b. Derived Data.

(i) Smoothing. In order to facilitate interpretation of the data, observed data profiles were smoothed using a least squares fit technique.
 Power law fit was assumed for wind speed and turbulence. The temperature
 (T) profile was fitted by using a second order polynomial of the form:

$$T = a + bz + cz^2$$

where

T = temperature in OC

z = height in m

Richardson's number, 1/L, BU and friction velocity ( $u_{\star}$  or USTAR, as listed in the data) were then calculated by the profile method using the smoothed data for the layers 2 to 8 m, 4 to 16 m and 8 to 32 m. Observed data were used to calculate Ri for the 32 to 48 m layer. Calculated power law exponents were: A for horizontal standard deviation, B for vertical standard deviation and P for wind speed.

(ii) Mathematical Formulae. The theoretical formulae used to calculate derived data by the profile method are as follows:

$$Ri = \frac{g}{T} \left( \frac{\partial T/\partial z}{(\partial u/\partial z)^2} + 0.01 \right)$$
 (2)

where

 $g = acceleration of gravity in m/s^2$ 

T = absolute temperature in OK

u = wind speed in m/s

z = height in m

Ri = 
$$\frac{0.74\zeta(1-15\zeta)^{\frac{1}{2}}}{(1-9\zeta)^{\frac{1}{2}}}$$
 for  $\zeta < 0$  (3)

and

$$\zeta = Ri + 15Ri^2$$
 for  $\zeta > 0$  (4)

where

The unstable case basis of calculating  $\zeta$  in equation (3) is presented by Businger (3). The stable case basis in equation (4) was formulated by Hansen<sup>2</sup>. It was decided to use this formula because it provides for values of Ri as large as one. Turbulence does not disappear for the larger positive values of Ri, hence the classical cutoff at Ri = 0.23 does not appear to be realistic.

To test for steady state, u\* was calculated from:

$$\frac{u}{u_{\star}} = \frac{1}{k} \left( \ln(/z_0) - \psi_1(\zeta) \right) \qquad \text{for } \zeta < 0$$
 (5)

and

$$\frac{u}{u_{\star}} = \frac{1}{k} (\ln(z/z_0) + 15Ri)$$
 for Ri > 0 (6)

<sup>&</sup>lt;sup>2</sup>U.S. Army Electronics Command, Atmospheric Science Laboratory, White Sands Missile Range, New Mexico. <u>The Critical Richardson Number</u>, Hansen, Frank V., September 1977.

Equation (6) was developed by Hansen .

where

k = von Karman's constant = 0.35.  

$$\psi_1(\zeta) = 2 \ln((1 + x)/2) + \ln((1 + x^2)/2)$$
  
 $-2\tan^{-1}x + \pi/2$  (7)  
 $x = (1 - 15\zeta)^{\frac{1}{4}}$ 

 $z_0$  = surface roughness in m

If  $u_{\star}$  is constant with height (i.e., not more than 20 percent variation), steady state state can be assumed.

Bulk Richardson's number (BU) is defined by:

$$BU = (g/T)(\partial T/\partial z + 0.01)z^2/u^2$$
 (8)

Where the symbol definitions are the same as for equation (2) above.

Richardson's number can be calculated from BU by using the formula:

Ri = BU 
$$\frac{\ln(z/z_0) - \psi_1(\zeta)}{\phi(Ri)}$$

where  $\psi_1$  is the same as in equation (7) above and  $\phi = (1 - 18 \text{ Ri})^{-\frac{1}{4}}$  for Ri < 0

No relationship between Ri and BU has been determined for positive values of Ri when z/L is determined by equation (4) or when Ri is greater than 0.20. These data can be used to determine the relationship.

(iii) Surface Roughness. Surface roughness  $(z_0)$  can be calculated from equation (5) by assuming that  $u_\star$  is constant with height. This was done using the layers from 2 to 8 m, 4 to 16 m and 8 to 32 m. Roughness was solved for using each of two pairs of layers. The resulting values were averaged. Thirty-two temperature and wind speed profiles were used to calculate  $z_0$ . The average value was 0.039 m. Inspection of the data indicates that  $u_\star$  is essentially constant with height when the 8 m wind speed is 3 m/s or more. This is also true for the night-time data for which the new Hansen method of calculating  $u_\star$  was used.

#### 2.4 DEPTH OF THE MIXING LAYER

Mixing layer depth is not included in the data presentation because of the controversial nature of that quantity. Mixing layer depth is needed to determine the vertical extent of cloud growth. The National Weather Service publishes forecasts of the afternoon  $\mathbf{h}_{\mathbf{m}}$  every day for all United States rawinsonde locations. This height is calculated by forecasting the maximum temperature and following the dry adiabat on a rawinsonde chart (skew-T) until the observed temperature profile is intersected. The height of the intersection is the forecast mixing layer depth. The observed afternoon value of  $h_m$  can be determined  $^{\left(4\right)}$  from the lowest temperature inversion or the height at which the virtual potential temperature increase with height reaches a maximum. Twenty Salt Lake City rawinsonde morning estimates of  $\boldsymbol{h}_{m}$  were prepared from the data in this report. Observed afternoon maximum temperatures were used for this purpose. These forecasts were compared to the value of  $h_{\rm m}$  obtained from the afternoon rawinsonde. The correlation between the morning estimate and the afternoon observed value was 0.66. Seven Dugway afternoon rawinsondes were used to determine the observed value of  $h_{\rm m}$  at the Dugway West Vertical tower. The correlation between these values and corresponding  $h_m$  for Salt Lake was 0.76. This at least indicates a possibility that the Salt Lake City rawinsondes can be used to estimate Dugway mixing layer heights.

In the Minnesota trials (10), slow-rise rawinsondes were used. Temperature inversions appeared in the planetary boundary layer on every afternoon observation. This was not true of the Dugway or the Salt Lake rawinsonde data. A change in technique may be indicated for the required resolution.

#### 2.5 UNIVERSAL METHODS OF ESTIMATING VERTICAL AND HORIZONTAL TURBULENCE

A universal formula is a dimensionless one which can be applied to surface boundary layer steady-state data taken anyplace. Interpretation in terms of data in this report follows:

and

where  $\sigma_F$  and  $\sigma_A$  are in radians

u,  $\sigma_w$  and  $\sigma_v$  are in m/s

A proposed universal formula for the unstable case follows:

$$\sigma_{\mathbf{w}}/\mathbf{u}_{\star} = 2(z/-L)^{1/3}$$

This formula is presented by Businger(3).

Another unstable case formula is presented by Panofsky (4) and is as follows:

$$\sigma_{\rm w}/u_{\star} = 1.3(1 + 3 z/-L)^{1/3}$$

A proposed universal formula for  $\sigma_v$  as presented by Panofsky (4) is:

$$\sigma_{\rm v}/{\rm u_{\star}} = (12 + 0.5 \, h_{\rm m}/-L)^{1/3}$$
 (9)

where  $h_{m}$  is the height of the first inversion.

Equation (9) agrees well with observations at several sites and with wind tunnel data during a near-neutral stability condition (11). This equation also agrees well with laboratory studies by Willis and Deardorff (12) for large values of  $h_m/-L$ .

Friction velocity can be calculated from the temperature and wind speed profiles as can L. Equation (3) above indicates the relationship of z/L to Ri. Equation (8) shows the relationship between Ri and BU. BU can be calculated from the vertical temperature gradient and wind speed. The parameter most difficult to determine in equation (9) is  $h_{\rm m}$ . Precise measurement of this quantity by means of rawinsonde might cost as much as the direct measurement of  $\sigma_{\rm A}$ . New remote sensing techniques may reduce that cost.

#### 2.6 PASQUILL STABILITY CATEGORIES FOR THE OBSERVED TOWER DATA

Turner <sup>(1)</sup> formulated a method of choosing a net radiation index from cloud cover, solar angle and time of day. His results appear in Table 2. This index and the 10 m wind speed can be used to determine the Pasquill stability category <sup>(13)</sup>. The basis of this determination is seen in Table 3. Cloud cover, wind speed and solar angle were used to classify the Pasquill category for the Dugway data using the measured wind speed at 8 m. Results appear in Table 4.

#### 2.7 DATA PRESENTATION

The West Vertical tower data<sup>3</sup> appear in Appendix A, Dugway West Vertical rawinsondes and pilot balloon winds aloft data appear in Appendix B, special three-hourly rawinsonde and pilot balloon data plus a few afternoon rawinsondes for Dugway appear in Appendix C. Salt Lake City rawinsonde data appear in Appendix D. In order to assist in the determination of the depth of the mixing layer, mixing ratio and potential virtual temperature were calculated for both the Dugway and Salt Lake City rawinsondes.

<sup>&</sup>lt;sup>3</sup>A limited number of copies of graphical representation of the observed tower data are available from Meteorology Branch, MT-DA-M, Dugway Proving Ground, Dugway, Utah 84022.

Table 2. Net Radiation Index

			Day				Nigh	ta
Cloud Cover (1/10)	0 - 5		6 - 9		1	0	0 - 4	5 - 10
Cloud Height (100m)		< 21	21-49	> 49	< 21	> 21		
Solar Angle: < 15 <sup>0</sup>	1	1	1	1	0	1	-2	-1
15 - 35 <sup>0</sup>	2	1	1	2	0	1		
35 - 60 <sup>0</sup>	3	1	2	3	0	2		
> 60°	4	2	3	4	0	3		

<sup>a</sup> Nighttime is defined as the period from 1 hour before sunset to 1 hour after sunrise.

Table 3. Pasquill Stability Category as a Function of Net Radiation Index and Wind Speed

Wind Speed		1	Net Rad	iation	Index		
(m/sec)	4	3	2	1	0	-1	-2
< 1	A	A	В	С	D	F	F
1	A	В	В	С	D	F	F
2	A	В.	С	D	D	E	F
3	В	В	С	D	D	E	F
4 .	В	C	C	D	D	D	E
5	С	С	D	D	D	D	E
6	C	С	D	D	D	D	D
> 6	C	D	D	D	D	D	D

Table 4. Pasquill Stability Categories for the Dugway West Vertical 48 m Tower Site

DATE Month/ Day 2/14 2/15	0 1		1 · 2 F	е н	4 4	2 4	0 1	7 7	8 1	6 0 0		TIME 11 12 D C C B	프	13 D	14 0	15 D	91 0	17 0			18 19 F F	18 19 20 F F F	18 19 20 2 F F F
2/16 2/17 2/18	<u> </u>	7.	E-F F F	IL IL	IL   IL	L L	L L	шш	шш	ഠ മ മ	ပေရရ	ഗ മ മ	<b></b>	<b>4</b> 8 8	<b>8 8 8</b>		S S C C	ပ ၁ ၁ ၁ ၁		ပပ	a ပ ပ ပ	о о п	ы Б Б Б Б Б Б Б Б Б Б Б Б Б Б Б Б Б Б Б
2/24 2/25			٥		ш	ᄕ	L	ш.	ш	Ō	٥	۵	۵	0 0	0		0	0 0		Q	0 0	0 0 F	D D F E
2/28			Ш		0	0	0	0	Ш	0	0 0	0 0	0 0	0 0	۵ ی		00		0	0 0	0 0 0 0 0	0 0 0 0 0 0 0	0 3 3 0 0 0 0 0 0
3/2	0 4		0 1	0 4	0 4	D E	О	ОЭ	О	ں م	0	م ی	ص ی	م ی	0 8		0 8	0 0		0 0	0 0	0 0 0	0 0 0 0
3/4			0		ш	ш	0	0	٥	0 0	0 0	0 0	0 0	0	0 0		0 0		٥	٥	0 0	0 0 0	0 0 0
3/8		0	0	0	0	٥	٥	0	0	0	0	0 0	ပပ	B 0	8 0		0 0	ى <sub>0</sub>		<b>0 0</b>	ა <u>ი</u>	C C F	C C F E
3/10											0	0 0	0 0	ပ	0	_	0						
3/14											0	ပ	ပ	8	В	0	J	. MSG	MSG	MSG C	MSG C F	MSG C F	MSG C F F
3/15	ш	ш	Ш	ш	ш	ш	ш	ш	ပ	8	ပ	ပ	ပ	ပ	ပ	0				Q	0 0	0 0 0	D D D F

Pasquill Stability Categories for the Dugway West Vertical 48 m Tower Site (Continued) 18 Table 4. 3/17 3/18 3/21 3/22 3/23 3/24 3/29 3/29 3/30 4/1 4/4 4/5 4/6

# Preceding Page BLank - FILMED

#### SECTION 3. APPENDICES

# APPENDIX A. FORTY EIGHT-METER TOWER DATA, DUGWAY PROVING GROUND

1. Definitions of symbols used in Appendices A through C.

A Exponent for SIGA power law profile Exponent for SIGE power law profile В BU Bulk Richardson's number DPG Dugway Proving Ground DPGWV Dugway Proving Ground West Vertical Grid Vertical gradient of potential temperature, OC/m DTH/DZ Vertical gradient of wind speed, sec-DU/DZ MR Mixing ratio, gm/kg P Exponent for WS power law profile Ri Richardson's Number SIGA Standard deviation of horizontal angle, degrees SIGE Standard deviation of vertical angle, degrees Temperature, OC TEMP TH Virtual potential temperature, degrees K U Wind speed, m/s USTAR Friction velocity, m/s WD Wind direction, degrees WS Wind speed, m/s

- 2. Complete 24-hour data were not obtained for each day of the 40-day collection period because of precipitation effects, power failures and instrumentation system malfunction.
- 3. Explanation of observed data table: (a) After Richardson
  Number the figures in parentheses, (4M), (8M), (16M) and (39.192M) are
  the geometric mean heights of the layer for which the number was calculated.
  (b) The minus (-) before CLD (TENTHS) means thin; i.e., -8 means 8 tenths
  of thin clouds.

<	•
F	
4	I
C	3
C	
u	
2	
9	
ä	ž
a	₹

0 4 4 0 0 4 4 0 0 0 4 4 0 0 0 0 0 0 0 0			. 4.	5.6:	6.2:
:00: 622 622 00AT	SIG		2	5	9
DATE 14/02/77 TIME 11:00:00 :  WEATHER  TEMP DEG C 4.4  DEW PCINT DEG C -3.9  VISIBILITY (MI) 85  LOW MID HI -8 TOTL 8:  LOW MID HI 7622 :  4=12 8= .08 P= .11  27.14 MW/CM2  (4M)14 (8M)39(16M)80 :  (4M)39 (8M)53 (16M)54:  (4M)39 (8M) .3419 (16M).3404:	(M/S) (C) (DEG) (DEG):	10.0	0.0	8.0	6.9
11:39.5 -3.9 3.5 -3.9 3.5 -3.9 3.5 -3.9 3.1 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	SIG	01		w	•
HI HI ST. 198	4	6.31	.84	.62	.14
MASSER AND THE RESTRICT OF THE	7010	94	0 00	5	ic ic
: DATE 14/02/77 TIME 11  HEATHER  TEMP DEG C 4.  VISIBILITY (MI) 85  8:LOW MID HI -8  : LOW MID HI -8  : LOW MID -36 PE 11  27.14 MW/CM2  2 (4M) -14 (8M) -39(16  4): (39.192M) -05 (DBSERV  81: (4M) -3442 (8M).3419 (1	\$3	99	9	16	5.50
14/0 TEN TEN POIN RIL 12 F 12 F 92M 92M 92M	3	m 1	4	4	20
T 30 3 1 0 0 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2.		:	•
DAN 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	OF	: 332.	32	32	32
8 81 8 81 8 81	96	•••	. 6.	7.7: 321.	8.5: 10.1: 325
0:00 7622 0 DA1	SIG				
0 H	GA	14.7	2.3	1.0	9.8
85 85 18 18 18 18 18 18 18 18 18 18 18 18 18	COE				
TIME 09:00:00 : DATE 14/02/77 TIME 10:00:00 : DATE NEATHER	TEMP SIGA SIGE: WD (C) (DEG) (DEG):(DEG) 4.71	4.63	4.4	+ - 24	3.87
177 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	==				
NT N	(M/S)	.50	.92	.11	2.24
14/ PDI BIL BIL 10 10 10 10 10 10 10 10 10 10 10 10 10	2			2	~~
PT S I S I S I S I S I S I S I S I S I S	EG.	: 315.	=	03.	. 4.
					 m m
2 8 2 51 1 7 4 )	SIGE: WD		6.3	7.2	5.5: 306. 3.4: 314.
ME 09:00:00  -3.3  -7.8  85  -8 TDTL  HI 7622  //CM2  //CM2  //CM2  //CM2  62 (16M) .5	S				
09:09:09:09:09:09:09:09:09:09:09:09:09:0	\$ 16A (DEG)	8.5	•	•	5.4
85 1 85 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2010	-	0 0	5	4 2 2 2
DATE 14/02/77 TIME 0° MEATHER TEMP DEG C -3. DEW POINT DEG C -7. VISIBILITY (MI) 85 DM MID HI -8 LOW MID HI -8 (AM)23 (8M)46(11 (4M)23 (8M)46(11 (4M)64 (8M)62 (60)	(C)	5.			1:1
DATE 14/02/77 TI WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI) DM MID LOM MID A=32 F 7.60 M (4M)23 (8M) (4M)64 (8M)		5.	3 -	_	
702 102 103 8 = 8 = 19	WS (W/S)	1.0	::	1.3	1.51
DEW POINT VISIBILITY VISIBILITY VISIBILITY OM MID A=17 B= (4M)23 (4M)64 (4M)64	1				
0ATE 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(DEG)	320.	320	310.	304
				••	
IS)	2				
(TENTHS HT (M) DNE NTS RADIATIO 4ARDSCN B	F -			.91	18.
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSCN NG. (1/L)*10 USTAR	HEIGHT (M)				,., 4
CCLO CCLO RXC RIC	-				

DATA	-
FITTED	01 - 1
SARAIOS	20000
FACT	-

	••	SM	TEM		SIGE		MS	TEM		SIGE	••	MS	TEMP	SIGA	SIGE
HEIGHT (M)	••	(M/S)	(3)	(DEG)	(DEC)		(M/S)	(3)	(DEG)	(DEG)	••	(M/S)	3	(DEC)	(DEG)
1.0		1.00		9.5	14.3		1.44	4.65	15.5	5.8		3.60	6.36	11.1	4.6
2.0	••	1.09		8.4	11.4		1.58	4.62	14.4	6.3	••	3.88	6.30	10.2	4.8
4.0	••	1.20		7.5	9.2		1.74	4.56	13.5	6.9	••	4.19	61.9	4.6	5.1
8.0	••	1.31		6.7	7.4		16.1	4.44	12.6	7.5	••	4.51	5.98	8.6	5.4
16.0	••	1.43		0.0	5.9		2.10	4.25	11.7	8.2	••	4.87	5.63	8.0	5.7
32.0	••	1.57		5.3	4.7	••	2.30	3.98	10.9	0.6	••	5.25	5.22	7.3	6.9
48.0	••	1.65	1.74	2.0	4.2		2.43	3.89	10.5	6.5	••	5.49	5.18	7.0	6.2
		Z0/N0	0T H/ DZ	BU*100	a.		Z0/N0	DTH/D2	BU*100	R.I.		ZO / NO	DT H / DZ	BU*100	1 0
4.0		.0360	0083	331	=:-		.0545	0195	366	12		.1057	0434	139	02
8.0	••	1610.	0500 - 7610.	663	94	••	.0300	1910	-1.002	63	••	.0570	0362	399	20
16.0	••	8010.	1100.	.743	00.		.0165	0094	-1.929	-3.33	••	.0308	0216	820	83
39.2*	••	.0163	.0150	31.036	00.	••	.0125	.0000	.625	00.	••	.0288	0013	245	16

								21.					4			
SF-		0	LINT MID MID	94 54 4 F	1.4 TOTL 7622		N N N	EMP DEG INT DEG LITY (M	C -3.	2 3 TOTL 6097		30	M-JE	00-II	10.0 -3.3 0 -4 TOTL HI 60	7609 6097
EXPONENTS NET RADIATION RICHARDSON NO (1/L)*10 USTAR	89	(4W)33 (39.192M) (4M)90 (4M)90	34.82 (8M) (8M)	MW/CM 98( 1085E1 -1.31	31.00	16 : 1A): .43: 579:	(4M) - (M4) - (M	4 8= .2 33.35 .20 (8M) 2M)-3.50 .56 (8M) 221 (8M)	MW/CM 59( 1085E 79	1.2 DAT	26::::26:::	(4M) - 100	28.95 28.95 201 - 25 201 - 25 30 (80)		MW/CM2 40(16M) (085ERVE) 54 (16M)	78 DATA1 52
PEIGHT (M)	1	: WO (	WS TE	TEMP SIGA	SI	GE :	MD (DEG)	WS TE	EMP SIG.	8 -	16E :	¥D DEG1	WS (M/S)	TEMP	SIGA DEG)	\$13E (DEG)
1.5			3.76	7.54	-		353.	4.5.4	63	11.5		343.	4.00	9.86	1.01	
8. 16. 32.		358.			2.5		2	. 52 . 78 . 98	69 9	. 6.		341.	5.35	8.74	9.5	6.2
LEAST SQUA	SQUARES	FITTED	1 1													
PEIGHT (M)		(M/S)	3	(066)	(066)		S/K)	(0)	(DEG)	016 (DEG		(M/S)	(C	C) (DE	DEG) (	DEG)
0.1	•	3.66		13			4-4	4.8	12.6	3.8	•	3.84	0 (		6.	
0.4	• •	3.8.	7.10	-			4.11			***		4.10	2 0			4.4
8.0	• ••	4.33			7.3		5.32	7.91	4.6	5.8		4.87	0	6 9	. 6	6.3
16.0	••	4.58		8			5.6			6.1	••	5.27	80			
32.0	•	4.85	יחי	7.7		••	0.0			7.7	••	5.70	8		. 8	3.5
0.84	.   .	20/00	15	804		-   -	20/00	10	80*100	8 2	-   -	20/00	DIA	J.B.	001	8.1
4.0		.0772	0558	186	07		1016	1650 9	131	04	-	.1186	6 0569	'	56 -	.02
8.0	••	.0408	0468	559	26		.0540		385	16	••	.0642				.20
16.0	••	.0210		-1.229	-1.08		.0287	323	801	19	••	034		i		78
39.2*	••	400	0075		-1.35	••	.005	0 - 0025	- 271	20	•	1 3				36

```
: DATE 14/02/77 TIME 15:00:00
                           WEATHER
                                      10.5
                        TEMP DEG C
                : DEW POINT DEG C -3.3
: VISIBILITY (MI) 70
CLD (TENTHS) :LOW MID HI -4 TOTL 4:
CLD HT (M) : LOW MID HI 6097 :
EXPONENTS : A= -.12 B= .18 P= .10 :
NET RADIATION : 21.35 MW/CM2
RICHARDSON NO .: (4M) -. 14 (8M) -. 41(16M) -. 86 :
               : (39.192M) (OBSERVED DATA):
               : (4M) -.40 (8M) -.55 (16M) -.58:
   (1/L)*10
   USTAR : (4M).3937 (8M).3897 (16M).3871:
                : WD WS TEMP SIGA SIGE :
  FEIGHT (M) : (DEG) (M/S) (C) (DEG) (DEG):
                                 10.24
        1.
            : 356. 4.30 10.03 10.9
        2.
                         4.85
                                9.69
        4.
              : 353. 5.28 9.43 10.6
        8.
           : 343. 5.65 9.20 9.9
       16.
                                               6.7:
                         5.90 8.92
       32.
       48.
              : 350.
                        5.94 8.65 7.2
                                                 8.7:
  LEAST SQUARES FITTED DATA
  : WS TEMP SIGA SIGE: HEIGHT (M) : (M/S) (C) (DEG) (DEG):
      1.0 : 4.16 10.04 12.7 4.3 :

2.0 : 4.46 9.97 11.7 4.8 :

4.0 : 4.78 9.84 10.7 5.5 :

8.0 : 5.13 9.61 9.9 6.2 :
      8.0
     16.0 : 5.50 9.22 9.1
32.0 : 5.90 8.76 8.3
48.3 : 6.14 8.71 7.9
                                     9.1 7.0
                                             7.9 :
                                             8.5 :
               : DU/DZ DTH/DZ BU*100 RI
            -----
     4.0 : .1114 -.0500 -.121
8.0 : .0597 -.0418 -.352
16.0 : .0320 -.0255 -.749
39.2* : .0025 -.0069 -1.048
                                             -.01
                                            -.20 :
                                             -.69 :
                                             -.54
```

<	•
F	
4	
C	1
0	1
u	ı
>	
6	
ŭ	
4	2
0	ľ
C	Π

		•• ••	•	A	69:			••	••	.7:	5.9:	••	.7:
0:0	7	HI 7622		DAT	112.	SIGE :							
18:0	-6.1 15 4 TO	HI .22	2	RVED	( 16M	I GA		22.6		21.8	21.0		20.9
I WE			W/CF	.656 108SE	1639	TEMP SIGA	20	6.54	*0	. 50	68	66	16
HER DEG C	CALL	04.	00	57	3M).	!!!	9						
DATE 14/32/77 TIME 18:00:00 WEATHER TEMP DEG C 7.8	DEW POINT DEG C VISIBILITY (MI)	: LOW MID : A= .05 B= .40 P=	6-	43 CE	(4M)01 (8M)03 (16M)05: (4M) 3.34 (8M) 8.75 (16M)12.60: (4M).3675 (8M).3511 (16M).3468: (4M),0952 (8M).0639 (16M).0489:	SM (M/S)		1.83	2.52	5.96	3.32	3.65	3.93
14. T	SIBIG	•05		1921	1.09	, ,							
DAT	O. V.	LOW A=		(39	7 T T T	MD (DEG		330.		329	323	336	341
		~ ~		TA):	.05:	SIGE: WD (DEG):(DEG)	**	••	••	***	3.6: 323.	••	3.0:
: DATE 14/02/77 TIME 17:00:03 : WEATHER : TEMP DEG C 10.0	07.	HI 7622		0 DA	M) . 3	SIS		2					
17:	-4.4 85 4 TO	H1 .12	M2	C16M ERVE	911	SISA DEG)		7.2		*	4.0		3.6
TIME	I	<b>"</b>	MM/C	1085	3511	TEMP S13A (C) (DES)	.05	80.6	10.	1.92	.90	. 65	1.42
02/77 WEATHER MP DEG	DEG	110	*1.	**	8M)	10	6						
WEA EMP	HID WID	2 "6	7	00 X	01 (	WS (W/S)		4.29	4.87	5.46	5.90	6.28	6.29
TE 14	DEW POINT DEG C VISIBILITY (MI)	LOW MID HI A= .03 B=20 P= .12		261.6	1.36			••		•	•		
DAI	Z V Z	. LOW		3.5	÷ ÷	COEC		: 356.		35	5.1: 346.	35	35
				.30 ATA )	4399	SIGE : WD (DEG):(DEG)				4.9	5.1		9.9
ME 16:30:33 10.5	4 101	HI 7622		.14(16M)30 : 08 SERVED DATA):	20 (16M)21: 49 (16M).4399:	8		8.7		4.	4.9		5.8
10.	-4-4 85 4 TO	=:	CM2	4( 16 SERV	11 6	S IGA (DEG)				1	9		2
	U- I	7 P=	10.81 MW/CM2	1 -	2	TEMP (C)	10.10	10.30	9.17	9.56	9.43	9.14	8.89
4/02/77 1 WEATHER TEMP DEG (	Y CMI	MID .	0.81	(8M) 4.13	(8M)	1	1	2 1			4	4	2
DATE 14/02/77 TI MEATHER TEMP DEG C	DEW POINT DES VISIBILITY (MI	.09 8= .17 P:	1	(44)05 (8M) (39.192M)-4.13	(4M)15 (8M) (4M) -44	WS (W/S)		5.2	5.8	6.52	96.9	7.3	7.4
176	VISIE			- (M)	- (M1	W0 EG)		-1		358.	.8	1.	57.
۵ 		. LO			22	: WD:			••	. 3	: 348		: 357
	(\$1	_	TION	RICHARDSON NO.:	01	3							
	FNET	ENTS	ADIA	RDSC	(1/L)*10 USTAR	HEIGHT (M)	1.	2.	*	8	16.	32.	48.
	CLD (TENTHS)	CLD HT (M)	NET RADIATION	ICHA	US OS	HEI							

		 SM	TEMP		SIGE	••	NS	TEMP		SIGE	••	MS	TEMP	SIGA	SIGE
HEIGHT (M)	2	 (W/S)	3	(050)	(DEG)	••	(M/S)	(3)	(DEG)	(DEG)	••	(N/S)	(3)	(DEG)	(DEG)
1.0		4.98	66.6	7.4	3.3		4.09	90.6	5.9	9.9		1.73	6.46	20.9	1.9
2.0		 5.38	45.6	1.9	3.8	••	4.45	40.6	1.9	5.7	••	2.02	6.58	21.7	2.5
4.0		 5.82	9.86	8.3	4.2	••	4.84	9.02	6.2	2.0	••	2.36	6.80	22.5	3.2
8.0		 6.59	9.70	8.8	4.8	••	5.27	8.97	6.3	4.3	••	2.75	7.20	23.4	4.3
16.0		 61.9	9.45	9.3	5.3	••	5.73	8.87	4.0	3.7	••	3.21	7.81	24.2	5.7
32.0		 7.34	6.05	9.6	0.9	••	6.24	8.65	9.9	3.3	••	3.75	8.30	25.2	7.5
48.0		 7.63	8.93	10.1	4.9	••	6.56	8.42	9.9	3.0	••	4.10	1.19	25.7	8.9
		20/00	DTH/D2	80*100	2	-	20/00	DTH/D2	80*100	R.I.		20/00	DTH/DZ	BU*100	۳.
4.0		1505	0312	i	02	-	.1368	0022	035	00		.1219	.1135	1.142	00.
8.0		 .0813	0264	i	10	••	.0744	0025	020	02	••	.0712	.0942	2.780	00.
16.0		 .0439	.04390169	i	30	••	.0405	0032	087	07	••	.0415	.0557	4.813	00.
39.2*		 6900.	0056	549	48	••	90000	++00	592	21	••	.0175	.0050	1.878	00.

TEMP DEG C 191117 (M1) 50 M1D H1 00 B = .42 P	:00 : DATE 14/02/77 TIME 20:00:00 : DATE 14/02/77 TIME 21:00:00 WEATHER EMPTORE C -1.1 : TEMP DEG C 0.0	SIGE: WD WS TEMP SIGA SIGE: WD WS TEMP SIGA SIGE: (DEG):(DEG):(DEG) (M/S) (C) (DEG) (DEG):	: 32896 2.08 13.7 : 281. 1.53 .22 14.1 : 1.59 2.95 : 2.38 2.27 .9: 312. 2.81 4.83 3.7 1.6: 289. 2.90 3.53 15.3 1.4 .8: 306. 3.18 6.49 5.1 2.0: 291. 2.84 4.05 15.0 2.2 2.1: 309. 3.61 6.62 6.2 2.7: 308. 2.73 4.54 17.6 3.2 1.4: 323. 4.22 6.66 5.5 2.3: 334. 3.51 5.80 17.3 2.8	SIGE: WS TEMP SIGA SIGE: WS TEMP SIGA SIGE: DEG): (M/S) (C) (DEG) (DEG): (M/S) (C) (DEG)	: .85 1.95 11.1 1.0 : 1.60 .51 13.2 : 1.16 2.30 9.5 1.2 : 1.84 .79 13.9 : 1.57 2.95 8.1 1.4 : 2.11 1.32 14.6 1	2.42 2.29 1 2.78 3.88 1 3.19 5.60 1 3.45 5.39 1	RI : DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ RU*100 RI .00 : .1628 .3140 7.228 .00 : .0971 .2612 3.352 .00 .00 : .1105 .2600 12.924 .00 : .0557 .2234 8.678 .00
14/02/77 TIM  MATHER  TEMP DEG C  191LITY (MI)  OB 8 .42 P=  7.18 MW/  7.1 (8M) 1.5  192M) .15 (0B  20.77 (8M)48.9  .0428 (8M) .027  WS TEMP  (W/S) (C)  (W/S) (C)  2.95  2.95  2.95  2.95  7.93  2.84  7.79  2.95  7.93  2.84  7.74  5.05  2.95  7.93  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74  7.74	19:00:00 : DAT 6.7 : DE 4.4 : DE 6.7 : DE 4 TOTL 4 : LOW 4 TOTL 4 : LOW 27 : A = 2 16w) 2.36 : (4w 16w) 2.36 : (4w (16m) 53.91: (4w (16m) 0.231: (4w	SIGA SIGE: DEG) (DEG):(D	2.1:	S I GE : (DEG) : (	w 4 0	 	100 RI : D 57 .00 : 51 .00 :
ום סביים מו ה ההההו עו ו	2/77 TIM P DEG C T DEG C TY (MI) D HI MID HI = .42 P= -7.18 MW/ (8M) 1.5	WS TEMP (M/S) (C)	17. 1.27 22. 2.12 20. 2.84 24. 2.95 36. 3.58	TEMP	4.14 4.46 5.05	6.12 7.74 8.95 7.47	DTH/DZ 8U 0 .2863 4. 0 .2336 10. 5 .1282 15.

-
•
-
-
•
-
C
-
u
>
ш
V
-
a

:	-															
DATE 14/02/17 TI				ME 22:00:00	: 00:0	DATE	14/02/77	77 TIME		23:00:00	DATE	15/02/17		TIME 00:00:00	00:0	
œ	œ	œ			•		WEA	ER					ER			-
TEMP DEG C	TEMP DEG C	DEG C		-1.1	••		TEMP DEG	DEG C	-2.8			TEMP DEG	DEG C	-3.3		
DEM POINT DEG C	POINT DEG C	DEG C		-10.0		MEG	POINT DEG	DEG C	-10.5		DEW	0 4	DEG C	-10.5		
IT OIM ME	HI OIN	I		TOT	0	LOW	OW MID	H	77	TOTE 0	MO	MID	Ī	TOTL	נר ס	
MIO	AIO			Ĩ		LOW		MID	H		TOM		OII	H		
A= .24 B= .14 P		.14		.62	••	-	.26 8= 1.14	1.14 P	90. =		- Y	.46 B=	1.07 P=	01 =		
-9-	9	.83 MV	1	I/CM2	•		9-	-6.83 MM	MW/CM2			7		/CM2		
(8M) 3	(8M) 3	2	-			(4M)	1.17*(8M)		5.704 L6M) ****	****	(4M)	.34	(8M)16.	34* (8M)16.05(16M)53.24	53.24	
1 39.1 44.4 ( 8M ) 44.4 ( 8M ) 44.4 ( 8M )		8M) **		1035KVEU	(16M193.98:	1.6C)	59.1721 6.23 4M) 54.4* (8M)		7.12* (16M)		(4 W)	•	(8M) ***	5.33*(8M)**** (16M)****	*****	
	0041 (8M).00	8M).0	04	W91)	.0071:		.0249*(8M)	8M).006	491) *69	.0000 * (16M) * 6900:		1	(8M).00	.086* (8M).0000 (16M).0000	.0000	
WD WS TEMP		TEN	1 0	SIGA	SIGE :	Q.	SI	TEMP	SIGA	SIGE :	9	N.	TEMP		SIGE	
_		3		(DEG)	090):(990)	(090)	(M/S)	3	(DES)	(DEG):(DEG	(DEG)	(M/S)		(DEC)	(DEG)	
-2.5	-2.5	-2.5	0					-2.1	-				-4.19	6		
245299			3	2.1	••	115.	1.16	•	0.91 8		118.	1.80		9.6		
			•		••		1.58	*0.		•		2.4	2 -3.13	3		
.59			-	16.6	2.0:		1.79		4 12.6	2.0:		3.1(		4 2.3	1.9	
60.1			-	7.8	2.4:	151.	2.04	2.85			98.	2.59			2.7	
1.72			9	4.9	2.3:		1.75		8	•	122.	2.0	2 2.06			
267. 2.10 3.6	1	1	0 :	9.9	2.7:		1.37		34.1	6.6:	i	1:5		0 13.7	6.6:	
LEAST SQUARES FITTED CATA	O CATA															
1	1 1 1 1		1	1	. 3010			1	1013	1010			TEND	4313	9010	
(M/S) (C)		100	-	0EG1 (	(066)	(M/S)	25	100	0EG)	(DEG)	3	(M/S)	5	(DEG)	1056)	
.1985	!	.85	!	3.3	1.5 :	1.	1.36 -1	!	10.1	.2	2	!	-3.97	2.2	.2	
		.54		3.9	1.7				12.2	.3	2	2.49 -	-3.65	3.0	*	
		.03		4.6	1.9	1.49			9.41	. 7.	7		3.04	4.1	6.	
1001 69		10.		5.5	2.0 :	-1			17.6	1.6	2		1.89	5.6	1.9	

HEIGHT (M)	3		(M/S)	(C)	S1GA (DEG)	S16e (0e6)		(M/S)		(DEG)	SIGE (DEG)		(M/S)	CC	SIGA (DEG)	SIGE (DEG)
1.0			.19	85	3.3	1.5		1.36	-1.42	10.1	.2		2.66	-3.97	2.2	.2
2.0		••	.29	54	3.9	1.7	••	1.42	-1.09	12.2	.3	••	2.49	-3.65	3.0	4.
4.0		••	.45	.03	4.6	1.9	••	1.49	14	14.6	.1	••	2.33	-3.04	4.1	6.
8.0		••	69.	1.07	5.5	2.0	••	1.56	.65	17.6	1.6	••	2.17	-1.89	5.6	1.9
16.0			1.07	2.70	4.9	2.2	••	1.63	2.47	21.1	3.6	••	2.03	90.	7.7	3.9
32.0			1.64	4.16	7.6	5.5	••	1.70	4.34	25.4	8.0	••	1.90	2.56	9.01	8.2
48.0			2.12	3.19	8.4	5.6		1.75	3.85	28.3	12.7	••	1.82	3.21	12.8	12.7
			: DU/DZ DTH/DZ	DTH/DZ	80*100	E I		20/00	DTH/D2	80*100	R.I	-	20/00	0TH/02	BU*100	<u>~</u>
4.0			.3668	.2797	19	00.		.0222	.3014	7.809	00.		0526	.3042	3.266	8
8.0			+150.	.2326	556.011	00.	••	.0116	.2554	24.107	00.	••	0246	.2680	13.124	00.
16.0			.0396	.1384	110	00.	••	1900.	.1635	56.060	00.	••	0115	.1955	43.545	00.
39.2			.3237	.0375	57	00.	••	0238	.0356	77.617	.00	••	1840	.0938	182.590	00.

OBSERVED CATA

DATE 15/02/77 TIME 01:00:00 : DATE 15/02/77 TIME 02:00:00 : DATE 15/02/77 TIME 03:00:00 : DEATHER	TEMP SIGA SIGE: WD WS TEMP SIGA SIGE: WD WS TEMP SIGA SIGE:  (C) (DEG) (DEG): (DEG): (M/S) (C) (DEG) (DEG): (DEG) (DEG):
C -5.0 : DA C -5.0 : DA C M C M C M C M C M C M C M C M C M C	(DEG) ( (DEG) ( (DEG) ( 49 60 50.0 84 4.5
: DATE 15/02/77 TIM  : DATE 15/02/77 TIM  : TEMP DGG C  : VISIBILITY (MI)  CLD HT (M)  : LCM  EXPONENTS  NET RADIATION:  A =47 R= 1.03 P=  NET RADIATION:  (44)14.60 (8M)34.6  (1/L)*10: (4M)***** (8M)*****  USTAR  : GAM)****** (8M)******	.23 .59 1.16
CLD (TENTHS) :LCLD HT (M) EXPONENTS NET RADIATION : RICHARDSON NO.:	HEIGHT (M) : (DEG)  1. : 176. 4. : 117. 16. : 120.

DATA	
FITTED	
SOUARES	
LEAST SO	
_	

			••		••							
\$16E (DEG)		0.		.2		1.4	2.5	8.1	0	00.	00.	00.
SIGA (DEG)	10.1	9.2	8.3	7.6	6.9	6.3	0.9	BU*100	8.065	25.731	63.376	112.247
(C)	-5.73	-5.32	-4.54	-3.11	78	1.79	1.57	DTH/02	.3778	.3233	.2143	1890.
(S/W)	1.55	1.60	1.65	1.71	1.76	1.82	1.86	20/00	.0179	.0093	.0048	0175
		••	••	••	••	••	••			••	••	••
SIGE (DEG)	.2	.3	9.	1.2	2.2	4.1	5.9	R I	8	.00	00.	00.
SIGA (DEG)	7.7	5.1	3.3	2.2	1.5	1.0	<b>80</b>	80*100	18.603	75.836	253.816	958.667
(C)			3	-2.86				DTH/DZ		.2305		
(W/S)	1.06	.98	16.	.84	.78	.72	69.	Za/na	0230	0107	6500	0275
		••	••	••	••	••	••			••	••	••
\$16E (DEG)	.2	4.	8.	1.6	3.4	6.9	10.4	R. I.	00.	00.	00.	00.
SIGA (DEG)	36.2	26.1	18.8	13.5	1.6	7.0	5.8	BU*100	81.168	192.490	343.458	76.815
TEMP (C)	-5.17	-4.78	-4.02	-2.63	04	16.1	1.34	DTH/02	.3675	.3114	1661.	9500.
(S/W)	.36	.43	.51	19.	.73	18.	16.	20/00	.0303	.0180	8010.	6100.
		••	••	••	••	••	••			••	••	••
HEIGHT (M)	0.1	2.0	4.0	8.0	16.0	32.0	48.0		4.0	8.0	16.0	39.2*

+
•
4
6
_
0
37
=
-
0
L
u
0
-

			!
06:00:00  6.1  1.7  TOTL 0  HI  .30  2  16M) 2.20  RVED DATA! (16M) 46.72 (16M) 0297	SIGE (DEG)	1.10	SIGE (DEG)
C -6.1 C -11.7 HI HI P= .30 MW/CM2 1.01(16M) 2.2 (OBSERVED DAT (OBSERVED DAT (O42 (16M)46.	SIGA DEG)	7.7	SIGA DEG1
MEATHER  TEMP DEG C -6 DEW POINT DEG C -11 VISIBILITY (MI) M MID HI M MID HI  =33 B=53 P=6.83 MW/CM2 4M) .42 (8M) 1.01(1 39.192M) 5.97 (0BSER 4M) 7.60 (8M)20.42 ( 4M) 7.60 (8M)20.42 (	TEMP SIGA	-7.83 -7.72 -7.51 -6.41 -6.41 -1.48	
MEATHER TEMP DEG C OINT DEG C ILITY (MI) MID H MID H MID 3 8=53 653 7 -6.83 M -6.83 M -6.83 M -6.83 M -6.83 M	WS (M/S)	1.67 2.13 2.76 2.76 4.37 3.95	TEMP (C)
DATE 15/02/77 T WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI) DW MID HID HID A=53 B=53 R (4M) 42 (8M) 1 (39.192M) 5.97 (4M) 7.60 (8M) 2 (4M) 6098 (8M) 2 (4M) 600 6 (4M) 60			MYS)
DATE DEW VIS VIS (4M) (4M) (4M) (4M)	LDEC	87. 94. 115. 132.	
1:00 L 0 : 6.18 : DATA):	SIGE : WD	21.2	SIGE :
7.8 2.2 2.2 101 101 108) (168)	SISA (DEG)	8 mon m	SIGA DEG) (
THER 05:30  THER	TEMP (C)	-7-40 -6-44 -6-44 -1-49	-
VIII O HI	T SM	1.13 1.51 1.51 3.06 2.19	TEMP (C)
DEW POINT VISIBILITY VISIBILITY VISIBILITY NU DW MID OW 1.44 4M) 1.44 4M) 1.44 4M) 1.44 4M) 1.44 4M) 1.44			WS (W/S)
a Pro	(DEG	144 138 167 186 204	
04:00:00 : 5.5 : 1.7 4 : 4 TOTL 4 : 24 : 24 : 24 : 26 : 26 : 26 : 26 :	SIGE : WD (DEG)	2.8: 1.7: 12.6: 2.2:	S 1GE IDEG)
ME 04:00:00 -5.5 -11.7 4 TOTL 4 HI 7622 -24 /CM2 64*16M)22.38 BSERVED DATA) 56*(16M)*****	S16A (DEG)	19.9 11.5 8.0 23.3 8.2	SIGA (DEG)
HER	TEMP (C) (	-7.30 -7.22 -7.13 -6.81 -3.75 1.38	
F - 00 - 1 - 8 8 8 8	(S/K)		TEMP (C)
DEM POINT VISIBILITY OW MID LOW MID A=14 B= (4M) .25* (4M) 2.88* (4M) 2.88* (4M) 2.88*		1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	WS (W/S)
	: WD	101. 111. 134. 163. 171.	
			""
M NO		South	3
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO.: (1/L)*10	HEIGHT (M)	1. : 10172 4. : 10195 8. : 111. 1.37 16. : 134. 2.50 32. : 163. 1.52 48. : 171. 1.34 LEAST SQUARES FITTED DATA	HEIGHT (M)
COMZK		•	

		••	••	••	••	••	••		!	••	••	••
SIGE (DEG)	7.4	5.1	3.5	5.4	1.7	1.2	6.	a I	00.	00.	00.	00.
SIGA (DEG)	11.3	0.6	1.1	5.6	4.5	3.6	3.1	BU*100	3.33.19	8.024	17.459	36.146
TEMP (C)	-8.06	-7.79	-7.26	-6.25	-4.43	-1.57	•23	DTH/D2	. 2664	.2459	. 2049	11144
WS (M/S)	1.43	1.76	2.18	2.68	3.31	4.08	4.62	20 /NO	.1533	.0945	.0583	0262
		••	••	••	••	••				••	••	••
SIGE (DEG)	.3	4.	9.	6.	1.2	1.8	2.2	RI	00.	00.	00.	00.
SIGA (DEG)	8.0	6.9	0.9	5.2	4.5	3.9	3.6	80*100	14.427	32.272	62.360	33.998
TEMP (C)	-7.30	-7.05	-6.56	-5.65	-4.06	-1.82	85	DTH/D2	.2435	.2189	1695	.0438
WS (M/S)	.62	.79	1.00	1.26	1.60	2.02	2.32	20/na	.0789	6650.	.0316	0544
		••	••	••	••	•••	••			••	••	
\$16E (DEG)	1.4	1.1	2.1	2.5	3.1	3.8	4.3	RI	00.	00.	00.	00.
SIGA (DEG)	18.7	16.9	15.3	13.8	12.5	11.3	10.7	80*100	17.065	45.168	107.292	210,600
TEMP (C)	-7.86	-7.55	-6.94	-5.77	-3.68	04	1.64	DTH/DZ	.3055	.2816	.2337	+610.
(W/S)	.74	18.	1.03	1.21	1.42	1.63	1.85	20/00	.0562	.0331	5610.	0113
			••	••	••	••	••			••	••	••
HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0		4.0	8.0	16.0	39.2*

\* OBSERVED DATA

	1
۲	
4	•
-	د
-	-
C	2
0	
200	-
ONCO	2
CONCE	200
COVER	1
CEDVER	CON VICE
CONCEDE	CO VICE
COVCACAO	CO CO

	1	DATE 1	15/02/77	TIME	07:00:00	0:00	0 :	ATE 15,	102/17	TIME	08:00:00		DATE 1	5/02/77	TIME	E 09:00:00	00:0	1
			WEATHER				••		WEATHER			••		WEATHER	ER			
	••		TEMP DEG		8-1-				TEMP DEG	3.	1.9-			TEMP DE	000	-0.5		
		VICIO	VICIBILITY (MI)	•	13.3			VICTOIL	VISIBILITY (MI	•			7 7 7 7 7	VICTOR TITY CAL	3 -	8.		
CLD (TENTHS)	. :	LOW :LOW	MID	Ξ	4 TOTL	11. 4	.LOW	10101	MID	H	TOTL	0	LOW WO	MID	H	4 TOTL	71. 4	
LD HT (M)		. LOM	GIM			7622	MOT :		GIW		IH	•	LOW	MID			7622	
XPONENTS		:	30 8=59	=d 6	3		. A	=33	B=44	. p=	.31	••	4=1	.8 8=	03 P=	6		
NET SABIATION			-7.18	MA/CM	42				-1.39	MW/CM2		••		9.00	O MW/CM	CM2		
RICHARDSON NO	••	(44)	.12 (8M)		.24(16M)	15.	. 14	4M)	.13 (8M)	.35(16M	16M)	: 86.	- (M+)	26 (8M)		74(16M)	-1.44	
		(39.192M)	2M1 4.84	-	OB SERVED	DATA		39.192		( OB SERVED		DATA):	-			COBSERVED	DATA	
(1/1)*10	••	( M5 )	(3M)	1.43		-	-		-		(16M)	9.67:		71 (8M)	199		:96:- (	
JS TAR		(4M).0697	( 8M)	0.	(16M)	9890.	-	4M) .13	346 (8M).	0972	(16M).	.0654:	(4M).2	1771 (8M)	1.2762	2 (16M)	1.2715	
		G.	- S3	TEMP	SIGA	SIGE		GX		TEMP SI	SIGAS	SIGE :	3	SM	TEMP	SIGA	SIGE	
HEIGHT (M)	:	_	-	-	056)	-	0):	-	2)	-		( DEG) :	(DEG)	_		(DEC)	(DEG)	
1.				-6.98					9-	5.10					.16			1
2.		.46	- 88		9.6		. 14	145.	'	5.09	10.8		161.	2.87	*0.	8.5		
4.			1	-6.54					'	-5.12		••		3.28	17			
. 8	••	.96			4.6	2.8				-4.93	8.1	3.5:	154.	3.66	33	5.3	4.7	
16.		100		-5.59	5.1					-3.89	4.6	2.1:	148.	3.76	57		4.3	
32.		116.		-4.30	2.9	1.6:		133.	5.66 -1	1.31	5.6	7.7:	149.	3.77	72	4.7	5.1	
48.		136.			4.3						3.4	.7:	151.	3.94	89		4.1:	
	1																	
LEAS! SQUEK		SQUARES FILLED CALA	CAIA				-								-			
		SH	TEMP		SIGA	SIGE		NS	TEMP	SIGA		\$16E :	MS		4	SIGA	SIGE	
HEIGHT (M)		(M/S)	(0)		EG)	(DEG)		(M/S)	3	( DEG )		DEG) :	S/W)		-	DEG )	(DEG)	
1.0		.61		-	0.5 1	13.6		1.65	'	14.1		: 9.0	2.8			8.7	5.0	
2.0	••	. 88				0.6		2.04	'	11.		. 1.	3.0	~		7.7	6.4	
4.0	••	1.28			0.	0.9		2.53	,	8.5		. 7.	3.2	1308		8.9	4.8	
8.0		1.85			.7	3.9		3.13	•	7.1		. 6.1	3.4	~		0.9	4.7	
16.0	••	2.68			9.	5.6	••	3.87	-3.68	5.6		. 8 .	3.6			2.5	9.4	
32.0	••	3.87			3.7	1.1	••	4.79	'	4.5		2.1 :	3.8	•		4.6	4.5	
48.0		4.80	0 -2.44	3	.3	1.4		5.43	14.	3.9		. 8.	4.0	~	2	4.3	4.4	
		20/00	DTH/DZ	80*100	100	R.I.		20/00	DTH/D2	80*100		RI	20/00	DTH/DZ	!	BU*100		1

-.06

-.177 -.511 -.993 -.233

.0669 -.0321 .0356 -.0262 .0190 -.0144 .0106 -.0006

3003

1.077 2.904 8.068 23.437

.1217

.1120

8888

.1610 .0858 3.081 .1154 .0903 6.193 .0842 .0993 12.992 -.0313 .1300 36.879

4.0 8.0 16.0 39.2#

۰
<
ı
>
a
2

					! /			•• ••	• ••	••	•• ••	! "	!	••	••	. !
2:00:00 .0 .5 TUTL 4 I 7622 10 WED DATA) 16M)-2.50 WED DATA)	\$16E (DEG)		7.0	10.6		SIGE (DEG)	4.2	6.4	6.9	8.2	10.1	R. I.	=	29	3.20	66.
- 00 4I . MIR	SIGA	22.6	20.7	19.7		SIGA DEG )		2 8				BU*100			•	
4 - 4   1   1	TEMP (C) (	0.34	9.69	8.73		4					18	1	1		-2.133	
5/02/77 WEATHER WEATHER TEMP DEG OINT DEG ILITY (MI MID MID 9 B= .24 32.23 .43 (8M)99 .17 (8M)99 .17 (8M)99	WS T	.83	11.	16		TEN (C)	10.05	9.97	9.5	9.06	8.55	DTH/D2	0639	052	0307	100-
F 15/ W POII SIBIL 09 64	-	2				MS M/S1				•	3.83	za/na			0200	
O A O O O O O O O O O O O O O O O O O O	: WD	154	147	: 145								190			•	
0:00 TL 4 7622 DATA) 0-91	SIGE (DEG)		9.0	11.7		SIGE DEG)	6.1	7.0	0.6	0.5	11.6	RI	.12		.22	
6.1 -7.8 4 TOT HI 7 -13 -13 (16M)- (16M)	SIGA DEG )	20.2		15.2		16A EG) (	2	50	2		5 2	001	345 -		- 3	11
~ ~ ~ ~ ~	TEMP (1)	8.16	7.28	6.86		P SI	22	20.			14.	80*10		·	-	-
2/77 DEG DEG DEG T DEG T OBG T	5) (5		.85			TEM (C)	00	7.77	7.46	7.12	6.73	DTH/DZ		0	.0205	. !
15/ TE POI 18 IL .11	I E	2	200			MS M/S)	•10	. 39	. 85	111	3.57	1	- 7970-	- 6140		- 6110
DATE DEW LOW LOW A= - (4M)	MO (DEG)	100		103		ž				77	m m	20/00 :	0.	•	5.	
03 1A) 272	SIGE :		5.1:	4.3:		S 1GE :		1.4	5.1	5.3	5.0	1 8	. 03	. 26	1.03	06.
TME 10:00:0  -2.8  -7.8  I + TOTL  HI 762  -11  4/CM2  -53(16M)-1.  D8SERVED DA  -7.1 (16M)  291 (16M).3	S 16A DEG)	10.8	7.9	5.6		SIGA DEG) (	4	00	4	- (	0.4	U*100			1- 690	1
F COCT TELL		4.86	4.31	3.57		•							-119	•	-	
177 100 100 100 100 100 100 100 100 100	-	•		4.98	TA	TEMP (C)	4.67	4.47	4.23	3.83	3.44	DT H / D Z	0525	0432	0245	6100
15/ TF POI 181L 192M	3	3.4			FITTED DAT	MS M/S)	3.37	3.63	4.23	1.57	5.16	1				
DATE LOW LOW A = - (4M)	: WD	145	138.	136.						,		13		•	•	1800.
S. ION NO.					SQUARES	8										
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO USTAR	HEIGHT (M)	1:	. 8 9	32.	LEAST SQ	1641	1.0	2.0	8.0	16.0	48.0		4.0	8.0	16.0	39.2*
CLD CLD CLD RET RET	I	1 4-			1	I										1

		DEW POINT	DEG	C 0.6	<b>A</b> 1		DEM PO	MEATHER EMP DEG INT DEG	.6-3			DEW POIL	WEATHER MP DEG NT DEG		6.7
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO. (1/L)*10		CIA	MID 8=-1.2 11.23 (8M) (8M)	1 10 HI 10 W/CM2 6.0(16 008 SERV (1	7622 8 M)187.8 ED DATA) 6M).0000		11. 11. 11. 11. 11. 11. 11. 11. 11. 11.	MID MID 8= 23.1 9 8M 7 (8M	HI 10 HI 10 MW/CM2 52.2(16) (OB SERV 65.3 (11) 1081 (11)	7622 5 5 M)-13.6 ED DATA) 6M)-1208		2 - 2 - 1 - 1 - 1 - 1 - 1	MID MID (8M)- (8M)- (8M)- (8M)-	HI 8 HV/CM2 2.53(10 C085ER 3.33 (1583)	TOTL 8 1 7622 10 5M)-5.28 VED DATA) 16M)-3.47
HEIGHT (M)	" "	WD DEG)	MS TE	TEMP SIGA	SIGE (DEG)	1	WD ()	WS TE	MP SI3	A SIG	E :	WD DEG) (A	WS TE	EMP SIGA	SIGE (DEG
1. 2. 4. 8. 8. 16. 32. 48. EAST SQUARES		63. 39. 60. 75. 112. 124.	.32 .341 .35 .35 .12 1	25 31 31 41 41 54 41 64 64 64	29.		167. 1. 215. 219. 165.	542 550 544 564 11 566	2, 25 2, 25 2, 17 2, 17 1, 97 1, 95 1, 69 1, 69 1, 36 1, 36	011210 81210 440		11. 1. 356. 8.	44 44 44 44 44 44 44 44 44 44 44 44 44	4.43 4.24 27. 4.06 25. 3.89 20. 3.72 17. 3.51 15.	7 5 13.8 1 18.1 2 17.5 8 16.6
HEIGHT (M)		(S/W)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		(M/S)	TEMP (C)	SIGA (DEG)	S16F (0EG)		WS (W/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)
0.7		42.	1.39		496.4 212.6 91.1		£ 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	22.00	77.2 68.8 61.4	45.5		1.37	4.24	35.1 29.3 24.5	12.3
16.0 32.0 48.0		25.		1 4 7 7	16.7		520	1.6	48.8	39.5		1.91	3.41	17.1	17.1
9.0		20/00 0153	0252 0325	8U*100	1 000		200	07H/02 0150 0132	8U*100 -4.009 -13.157	1 1		20700 7470.	14/02 .0295 .0245	BU*100 682 -1.987	R1 19
39.2*		0209	.0356	3621.00	800		0037	-9010-	-36.05-	181		.0031			-1.63

CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (17L)*10		DATE DEW VISI COM A= (4M) (39.1	16/02/77  WEATHER  WEATHER  TEMP DEG  POINT DEG  BILITY (MI  MID  MID  OS B= .25  33.70 68 (BM)- 92M)  1.83 (8M)- 2117 (8M),	MI) HI HII) -22 -22 -22 -22 -22 -22 -22 -22 -23 -23	88 SS S	7622 7622 -4.32 DATA 1-2.8	7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	ATE 16 DEW PO VISIBIL W W OW =29 4M)-5. 39.192 4M)-14	MEATHER MEATHE	TIME  1 8  1 8  HI 5  P=  MW/CM	00 50 50 80	:00 622 622 -44.0 DATA) -28.8	DATE DEW VIS LOW LOW A= - (4M) (4M)	E 16/02/ WEAP TEMP W POINT SIBILITY MID M-13 8= 28 1-6.35 ( 192M)	777 ATHER DEG DEG DEG MID MID .24 (8M)- (8M)-	C 1 C - B HI 10 P= MW/CM 19.10 CBSE 25.0	4:0 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4	0:00 TL 10 7622 -37.7 DATA)	
HEIGHT (M)		: WD	WS (M/S)	TEMP (C)	S IGA (DEG)	STGE (DEG	-=	WD CEG	WS TE	ENP SI	16A S	IGE DEG)	: ( DEG)	N. S.	S TE	MP S	16A EG)	SIGE	1
1. 2. 4. 8. 16.		21. 111. 19. 8	2.24	9.000	2 18.5 8 18.5 17.1 2 15.3 2 15.9	1 21 21 21 21 21 21 21 21 21 21 21 21 21		42. 49. 34.	469.	8.76 8.68 7.88.53 7.88.41 7.88.28 7.89.28	1 000001		128. 121. 130. 121. 126.		.08 12 .08 12 .19 11 .20 11 .29 11	11.	442.0 42.0 333.7	20.2 26.7 27.5	
LEAST SQUARES HEIGHT (M)	ES	FITTED WS	DATA		SIG	SIGE (DEG)	;   -	MES (M/S)	1 150	SI		и п п ш		WS WYS	TEND	SI		SIGE DEG1	
1.0		1.96 2.09 2.24	0000					10001	8 6 6 5 9 6 6 5 9 6 6 5 9 6 6 5 9 6 6 5 9 6 6 5 9 6 6 6 6	14000	1 2 2 2 2	1		08	10001	54.			1
16.0 32.0 48.0	.	2.55 2.73 2.84 2.84	15	1 00	15.6 15.6 15.3	14.3 17.0 18.8		72 76 76 78	8.28 7.97 7.77 0TH/DZ	51.6 42.3 37.7 8U*10	298 298 8	1 53.85	1.2	040-16	11.43 11.12 11.15 0TH/02	34. 34. 32.	32 26	20.3	
8.0 8.0 16.0 39.2*		0049	50477 50400 110246 80056	11789	535 574 394 984	18 1.00 5.82 6.26		.0108 .0057 .0030	0182	-2.386 -7.560 -19.61 -64.95	6 -2.	43	10000	070	152251	-1.383 -4.164 -8.116 - 24.196	1110 1	114 89 00 00	1 1
80 4		CESVED DAT																	

OBSERVED DATA

CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (L/L)*10 USTAR	z	OJA	P DEG T DEG TY (M D 40 MID 4 7.18 (8M) (8M)	14. 85 1 10 878 HI P= .0 W/CM2 29.3(16 08 SERV 08 SERV		L 10:1 622 : 76.08 : 0ATA) : -47.6 :	DEW P VISIB LOW A=0 (4M) - (4M) - (4M) -	TEMP 0 10 IL ITY MID	CC 1 85 1 85 1 85 1 85 1 85 1 85 1 85 1		L 10:1 622 : 11.73 : DATAD: -1.15:	DEW PO VISIBIL LOW A=65 (4M) 5. (4M) 5.	MEATH NE DE MEATH NE DE ME DE ME	C C C C C C C C C C C C C C C C C C C	13.3 -5.6 10 TOTL 19 TOTL 16M) ERVED (16M)	7622 .82 DATA)
HEIGHT (M)		: WD :	WS TE	TEMP SIGA	0		WD (DEG)	WS (M/S)	TEMP SIG.	4-	SIGE :	(DEG)	WS T	EMP C) (	1GA EG)	S1GE (DEG)
1. 2. 4. 8. 16. 48.		61. 55. 42. 36.	.91 12 1.01 12 1.01 12 1.01 12 1.02 12 1.03 11	23 40 24 50 24 60 24 60 26 60	0 2-02	10.6: 14.9: 12.0: 15.9:	36. 37. 28. 37. 50.	1.57 1.93 1.98 1.99 2.12	12.04 12.04 11.92 11.81 11.81 11.57 11.35	12.0 9.1 10.1	5.4:	104. 128. 119. 114.	. 50 . 69 . 69 . 81 1.57 2.39 2.66	10.29 10.62 10.62 10.85 11.32 12.12	24.7 15.2 1.9 3.7 4.7	1.6:
LEAST SQUARES HEIGHT (M)	S	FITTED CATA WS (M/S)	CATA TEMP	SIGA (DEG)	S I GE	3.56	WS (M/S)	<u> </u>	MP SIGA	A SIGE	3E :	MS (M/S)	TEN CO			SIGE DEG)
0.000		.93 .95			9.1		1.55				- 266	16.		60-		8.6.1.
32.0 48.0		1.01	12.07		12.6		1.84 1.95 2.06 2.13	11.90 15 11.77 16 11.55 3 11.36		0000		1.48 2.18 2.74	10.92 11.39 12.05 12.31	2.8		2.2
			DT H/ DZ	*	α		20/00		1		"	70/NO	DTH/02	38		R.I.
4.0 8.0 16.0 39.2*		.0033	0107 0093 0064 0037 -	622 -2.073 -5.543 -18.837-	05 24 -4.22 142.44		.0093	0061	111 359 -1.007 -4.726	94.3	* • • •	.0665	.0723	9.520 15.840 22.964 17.250		8888

CLD HT (M) EXPONENTS		9 8		EG C	8. 50-6.	7		DEW PO	TEMP DEG POINT DEG BILITY (MI	20-1	40 4	7		DEW P	POINT DEG	EG C EG C (MI) 2	-8.3	188
	. LOM	.26	₫.	9	78 HI	1622		.99	8	8	.15	7622			-	67	11.	7622
RICHARDSCN NO.		(4H) 1.27	-6.83 7 (8M)	E N.	54			(4M) 36.83	-6.83 (84)		4W/CM2 ****(16M)			(4M) 1.13	-6.83 .13 (8M)		MW/CM2 2-79(16M)	5.53
		(4M)63.22 (4M).0202		- 10	**	(16M) . 0120		0000 · (W+)			U	(16M) ***** (16M) .0000	***	(4N) 50 (4N) 0			# (16M	
1	Q¥	-	W.S.	TENP	SIGA	SIGE		9	N.S.	TENP	SIGA	SIGE		O.M	HS	TEMP	SIGA	SIGE
£	0	_	-	3	-	(DEC) :(	=	DEG	23	-	DEG	(DEC):(	=	_	(N/S)	3	(050)	(DEC)
		-		6.25	5		-			1.42						4.61		
	: 125.		.79	7.0	1.41 8			281.	15.	3.29	4.		••	154.	1.03	5.52	7.0	
		1		9.70			••		.17	4.83			••		1.13	5.82		
	: 144.			11.3			••	268.	• 63	6.15	36.4			176.	1.33	6.28	2.0	
	: 130.		2.39	15.5	5 5.3			157.		14.6	62.2			172.	1.79	7.39		1.8:
	: 129.			12.8	7 7.3	5.7:		.911		-	12.3	10.5		163.	•	7.62	13.5	8
	: 145.	2	19.	12.1	3 6.0			132.	.87	12.02	13.0	*	.5:	134.	2.08	8.31		1.5
SQUARES		FITTED DATA	ATA				i											
	••	SM	TEMP	4	SIGA	S 1 GE	••	SI	_	۵	SIGA	SIGE	••	N	_	EMP	SIGA	SIGE
HEIGHT (M)		M/S1	(3)		(DEG)	(DEC)		(M/S)	(0)	-	DEG1	(DEG)		S/W)	-	5	DEG)	(DEG)
		.88	7.39	6	14.8	1.		.50		0	.8 1	62.8	••	.8	5.	1	3.7	.3
	1 :	01.	7.82	2	12.4	.2	••	.56				1.06	••	66.		32	4.3	*
	-	.37	8.62	2	10.4	.3	••	.62			1.3	20.6	••	1.18		25	5.0	
	-	.72	10.0	1	8.7	9.	••	69.			9.9	28.2	••	1.4	91.9 0	91	5.8	:
	: 2	2.15	12.29	6	7.3	1.0	••	.77			1.2	15.7	••	1.6		2	6.7	1.1
		89.	14.06	9	1.9		••	.85	12.37	7 26	7.0		••	1.98	8	60	7.8	2.7
	: 3	.05	12.2	_	5.5			16.	- 1		2.	6.2		5.19		*	8.5	3.5
	: 00/02		DT H/ DZ	N8 2	04100	RI		20/00	<b>DTH/D</b> 2		8U*100	RI		20/00	DTH/DZ		8U*100	RI
	: .102	6	.3849	=		8		.0220	. 5021	73	.831	8		.0680		5.	266	00
	: .0642		.3154	23	•	00.	••	.0122	.4266	201.603	03	00.	••	.0403	.1294	14.	772	00.
	1040. :		.1764	33		00.	••	8900.	.2756	416	174	00.	••	.0240		29.	897	00.
	.00		0012	-	*00	00	••	6900	.0269	163	. 893	000	••	.0013	.0531	66.	455	00.

	: DATE	DATE 16/02/77 TIME 22:00:00	7 TIMI	E 22:00		DATE	: DATE 16/02/77 TIME 23:00:00	7 TIME	23:00		: DATE	: DATE 17/02/77 TIME 00:00:00	TT TIM	E 00:00	00:
		MEATHER	HER		••		WEATHER	HER				WEA	WEATHER		
		TEMP DEG C		0.0	••		TEMP DI	2 9 E	-1:1-		••	TEMP DEG C	DEG C	-1.7	
	. DEM	DEM POINT DEG		-8.3	••	DEW	DEW POINT DEG C	- 0 93	10.0		BEN	TNIO	DEG C	-10.5	
	: VIS	VISIBILITY (MI) 20	(MI) 2	0	••	VISI	VISIBILITY (MI) 20	(MI) 20			SIA :	IBILITY	(MI) 2	0	
CLD (TENTHS)	: LOM	MID	Ŧ	5 TOTL		S:LOW	MID	H	TOT	0	HO7:	MID	H		TOTL 0
CLD HT (M)	. LOW	MID	0	HI 7622		HOT :	MID	0	_		HOT :	I	MID	Ħ	
PONENTS	••	A=04 B= 1.09 P=		•		A= .	A= .04 B= .69 P= .	=d 69.	.35		: A= -	-9 10.	-69 P=	.24	
NET RADIATION		-9-	-6.83 MW/CM2	CM2			-6-	83 MW/C	MZ			-5.37 MW/CM2	.37 MW/	CM2	
RICHARDSON NO.: (4M) 2.74*(8M)***		1 2.74*18	****(W	*(16M)*	* ****	( M+)	.22 (8	4) .45	(H91)	.70	(H4)	2.12	841 5.3	5(16M)1	1.00
	: (39.	.192M110.	23 (08:	SERVED	DATA):	(39.1	92M1 7.	86 (085	ERVED	DATA	: (39.	: (39.192M) 1.55 (OBSERVED DATA):	.55 (08	SERVED	DATA
(1/1)*10	( 4M) :	1 287.*(8	#***(W	( H91) *	*****	( M )	2.36 (8)	4) 4.44	(16M)	5.05	(H+) :	) *****	8M) ***	(H91) +	*****
USTAR	: (4M)	: (4M).0126*(8M).0000 (16M).0000: (4M).1139 (8M).0954 (16M).0888:	M).000	(191) 0	:0000	(4M).	1139 (8	M).0954	(164)	.0888	14 H	(4M).0144 (8M).0072 (16M).0043:	8M1.007	2 (16M)	.0043
	9	MS	TEMP	SIGA	SIGA SIGE : WD	9	M.S	TEMP	SIGA	SIGE	2		TEMP	SIGA	SIGE
HEIGHT (M) :(DEG)	:( DEG)	=		(DEG)	(DEG):(DEG)	DEG	(M/S)	(C) (DE3) (DEG):(DEG)	DESI	(DEC)	(DEC)	(N/S)	3	(0) (0)	(DEG):
1.			29					.01					-3.23		
2.	: 11.	1.25	14.	39.0	••	33.	1.83	1.23	6.4	•	: 237.		-2.14	14.8	
+.	••	1.65	1.65		••		2.17	3.55							
8.	: 338.	1.74	3.45		2.3:	22.	3.56	4.63	3.2	6.	: 266.	1.90			1.6
16.	: 332.		4.05	26.8	3.4:	10	11.4	4.95	2.1	1.4	1.4: 289.		3.50	21.6	5.5:
32.	: 341.	15.1	4.53		12.0:	16.	5.51	5.60	13.6	8.0	. 7.				17.9
48.	: 356.	1.30	5.17	32.1	13.0:	17.	5.78	9.49	2.9	1.7	15.				3.3

		27	TCM		2010			TEM	4713	2010		27	TCMD	6104	610
HEIGHT (M)		(M/S)	3	(DEG)	(DEG)		(M/S)	50	(DEG)	(DEG)		(N/S)	3	(050)	(DEG)
1.0		1.50	.48	36.2	.2		1.58	1.44	3.8	.3		1.08	-1.74	12.0	9.
2.0	••	1.50		-	*	••	2.02	1.74	3.9	*	••	1.28	-1.31	11.9	6.
4.0	••	1.50	1.30		1.0	••	2.58	2.30	4.0	.1	••	1.50	49	11.8	1.5
8.0	••	1.50	2.29	-	2.0	••	3.29	3.33	4.1	1:1	••	1.17	1.03	11.7	2.4
16.0	••	1.50	3.86	32.2	4.4	••	4.19	4.97	4.2	1.7	••	2.08	3.60	11.6	3.9
32.0		1.50	5.41	•	9.3	••	5.35	19.9	4.3	2.7	••	2.45	6.86	11.5	4.9
48.0		1.50	4.83		14.4		91.9	9.09	4.4	3.6	••	2.10	7.60	11.4	8.4
		20/00	0TH/02	80*100	ж П		20/00	DTH/D2	80*100	RI		20/00	DTH/DZ	BU*100	1.
4.0		1000-		6.680	00.		.2110	.2750	2.358	00.		.0823	.4003	10.186	00
8.0		10000		22.458	00.	••	.1346	.2322	4.878	00.	••	.0485	.3512	25.631	00.
16.0		0000	.1400	860.99	00.	••	.0858	1941.	7.530	00.	••	.0285	.2529	52.748	00.
39.2*		0131		135.103	00.	••	6910	.0638	10.840	000	••	. 05 R.R	1531	88.038	00

\* OBSERVED DATA

(39.192M) 4.48 (DBSERVED DATA): (39.192M) .70 (UBSERVED DATA): (39.192M)\*\*\*\* (OBSERVED DATA): [4M]34.05 (8M]\*\*\*\*\* [16M]\*\*\*\*\* {4M] 1.44\*[8M] 8.7\* [16M]\*\*\*\*\* [4M]\*\*\*\*\* [8M]\*\*\*\*\* [16M]\*\*\*\*\* [4M].0021 [8M].0022 [16M].0024: .92 (8M) 5.13(16M)21.24 : A= -.02 B= 1.27 P= -.37 -5.37 MW/CM2 (M/S) S :(DEG) 149. ç RICHARDSON NO. NET RADIATION HEIGHT (M) (1/1/10 EXPONENTS -: 4 USTAR

(4H) 3.49 (8H) 5.38(16H) 7.30

.654 16M) 10.97

.17\* (8M)

( 4H)

.43 B= .30 P= .

HI 7622

NI D

COM

HI 7622 6 TOTL

A= -.34 B= -.03 P= .19

MID

LOW 10

HI 7622 6 TOTL

MID

CLD (TENTHS

CLO HT CM)

-3.62 MW/CM2

8 TOTL

: DATE 17/02/77 TIME 03:00:00

: DATE 17/02/77 TIME 02:00:00

DATE 17/02/77 TIME 01:00:00

OBSERVED DATA

WEATHER

WEATHER

WEATHER

DEW POINT DEG C VISIBILITY (MI)

-10.0

DEW POINT DEG C -1 VISIBILITY (MI) 25

-111-1

DEM POINT DEG C VISIBILITY (MI) SIGE

SIGA

5

(N/S)

(DEG):(DEG)

SIGE : #D

SIGA

TEMP 3

(DEC)

(W/S) 3.36 3.11 1.51 2.47 S 174. ( DEG ) : ( DEG ) 110. 144. ç 13.4: 3.2: SIGE : 1.4: 3.6 7.1 SIGA (050) -1.89 1.09 3.89 .08 4.81 -2.62 TEMP 3 .97 .43 .76

LEAST SQUARES FITTED DATA

\*\*\* 2.5:

15.5 20.0 23.7

1.10

-2.47 .95 3.07

-3.36 -.45

.23

-3.14 1.73 4.95

-3.26 -3.37

104. 196. 251.

2.0:

4.9 15.3 15.7

-4.17 -4.57

(DEG) 5.0 00. 2.5 : .. 9:1 3.5 3.1 10EG1 8U\*100 12.3 16.6 26.6 .2266 186.441 .2488 120.960 TENP (C) -2.60 -4.03 +6 .-2.87 -4.29 1.53 -3.54 DTH/02 .35 1.25 .81 20/no .0509 .0391 DEG 1.7 888 1. 1.1 1.6 1.6 (DEC) 8U\*100 15.2 54.4 19.3 12.0 6.6 6.5 15.513 5.779 3 1.15 5.07 -3.98 -3.57 -2.79 -1.33 .3379 .3845 2.24 2.56 2.92 2.92 3.15 (M/S) 15.1 1.72 .0495 .0867 20/00 (050) .00 3.5 14.1 SIGA (DEG) BU\*100 8.5 8.6 60.420 10.831 TEND -1.52 (3) 3.28 5.71 .84 89.--1.95 DTH/DZ .3396 .4029 2.43 1.46 . 89 . 88 .59 IN/SI --1255 -.0486 20/00 HEIGHT (M) 1.0 8.0 16.0 32.0 8.0

\* OBSERVED DATA

800

.1823 253.072

.0300

.0037

34.174 26.430

.0381

-.0437

000

249.967

.2130

-.0189

645.254

.0362

.0169

16.0

355.

32.

.

	_
	٢
	•
1	0
-	0
-	ш
1	چ
1	w
-	2
1	8
	-

		WEATHE	- ~	ME 04:00:00		DAIE	WEATHER	BATE INSTITUTE USTOCIO	5		2 40	. WEATHER	. WEATHER	200.00	
	••	TEMP DEG C		-3.3	••		TEMP D	EG C	-3.3	••		TEMP L	DEG C	-5.0	••
	. DEM	DEM POINT DEG	v	-11.1	••	DEW	POINT D	- 2 93	11.7	•	DEW	POINT	) EG C	-11.7	•
	: VISI	VISIBILITY (MI)	-	2	••	VISI	BILITY	(MI) 25		••	VISI	BILITY	(MI) 2	2	••
CLD (TENTHS)	*COM	MID	H	10 TOT	1.011	MO	MID	H	7 101	1.	LOM	MID	Ŧ	7 TO1	1: 1:
CLD HT (M)	* LOM	I	MID	HI	HI 7622 :	LOW	H	: LOW MID HI 7622	H	. 279	LOW	I	MID HI 7622	H	: 779
EXPONENTS	: A= -	A=72 8=04 P=	04 P=	.50	••	A=	24 8=	-19 P=	.55		A=	14 8=	A=14 B= .68 P=	60.	
NET RADIATION		-5.	-5.37 MW/C	CM2	••		-4-	67 MW/C	M2	••		-5.	/MW 60"	CM2	
RICHARDSON NO.	: (4M)	.75 (8M	-	3(16M)	1.93 :	( HT)	5.40 (8	33(16M) 1.93 : (4M) 5.40 (8M) 8.38(16M) 9.57 : (4M)28.74 (8M)86.67(16M)206.2	(W91)	9.57	(4H)2	8.74 (1	3M) 86.6	7(16M)2	06.2 :
	-	39.192M)10.25 (0	.25 (08.	SERVED	DATA):	(39.1	92M1 .	<b>66 (08S</b>	ERVED	DATA):	(39.1	92M1 7.	37 (08	SERVED	DATA):
(1/1)*10	: (4M) :	(4M)23.00 (8M)34	3M134.5	8 (16M)	36.19:	*(W+)	**** (8	***** (WI	(16M)	*****	*(W\$)	****	**** ( WE	# (16M)	*****
USTAR	( 4M) :	(4M).0203 (8M)	8M).017	( HO1) 6	.0182;	( 4M)	0014 (8	.0179 (16M).0182: (4M).0014 (8M).0013 (16M).0017: (4M).0009 (8M).0003 (16M).0001	(164)	.0017	( +W)	6000	3M1 .000	3 (16M)	.0001:
	9	M.S	TEMP	SIGA	SIGE :	9	SH	TEMP	SISA	SIGE :	QM	MS	TENP	SIGA	SIGE :
HEIGHT (M)	:( DEG)	(M/S)	3	(DEG)	(DEG) (DEG):(DEG)	(DEC)	(W/S)	(M/S) (C) (DEG) (DEG):(DEG)	DEG.)	(DEG) :	(DEG)	(M/S)	(M/S) (C) (DEG) (DEG):	(DEG)	(DEG):
1.			-4.36					-4.69					-6.37		
2.	: 72.	69.	-3.93	39.3	••	: 129.	.30	.30 -2.36	29.3	•	: 171.	96.	-5.93	19.4	••
4.	••	.88	-3.34		••		24	65		••		1.54	-3.75		••
8	.01 :	1.05	•	27.6	2.1:	34.	.38	11		1.4:	162.	.90	-2.08		:4:
.91	: 335.	2.24	92	8.3	2.8:	290.	10.1	94.		1.7:	289.	.76	05		4.7:
32.	: 324.	2.92	.65	8.7	2.2:	270.	1.39	1.99	14.7	1.7:	1.7: 281.	1.75	1.86		1.4:
48.	: 337.	2.71	1.28	3.6	2-1:	283.	1.03	1.98		2.1:	291.	1.42	3.11		2.3:

	•		1	ľ	
1	١				
į	•				
9	(				۱
è	•				
1	i		Ĺ		
1	١				
j	į			•	
j	•				
	۱				
9			,		
1	i		ı		
j	Ċ				
	•		į	ľ	
	:			١	
Ĵ	(		2		
9	ı				
À					
Ó	(		,		
į	•	į		ľ	
ã	٠	1		i	i

SIGA	SIGA	_	S	GE		SH	TEM		S16E	••	N	TEMP		SIGE
(DEG) (DEG) :	_	_	(DEG) :			(8/N)	(3)	( DEG)	(DEG)		(N/S)	3	(DEC)	(DEG)
	79.3		2.6 :			.16	-2.92	37.2	1.0		.93	-5.75	22.2	.2
48.1 2.5 :	48.1		2.5 :	••		.23	-2.60	31.5	==	••	1.00	-5.30	20.1	
	29.5		2.4 :	••		.34	-2.00	26.7	1.2	••	1.06	-4.45	18.2	.5
	17.7		2.4 :	••		64.	16	22.7	1.4	••	1.13	-2.89	16.5	∞.
	10.7		2.3 :	••		.73	.82	19.2	1.6	••	1.21	30	14.9	1.3
	6.5		2.2 :	••		1.07	2.48	16.3	1.9	••	1.29	5.69	13.5	2.1
			2.2 :			1.33	1.75	14.8	2.0		1.34	2.79	12.7	2.8
BU*100 RI : D	. I. C	. I. C		0	0	U/DE	DTH/02	80*100	RI		20/00	DTH/02	RU+100	
: 00 : :04	: 00 : :04	: 00 : :04				0445	i	148.229	00.		.0229	_	21.282	8
28.953 .00 : .00	: 00 : 656	: 00 : 656	••			1324	.2448	230.281	00.	••	.0122	.3557	64.187	00.
: 00. 112	: 00. 112	: 00. 112		•	•	3238	1	262.849	00.	••	.0065	_	52.448	00.
-: 00. 196	-: 00. 196	-: 00. 196				.0225		33.999	00.		0206	_	87.626	00.

2 222	Läl	1.7:	1			
0.0 -8.3 10 TOTL 10: HI 7622: -32 42 116M) 1.07: ERVED DATA): (16M)11.30:	SIGE (DEG)		\$16E	34.2 20.6 12.5 7.5	2.7 2.0 8.1	8 4 8 8
1 - 1-11	SIGA (DEG)	9.1	SIGA DEG1	17.3 13.5 10.5 8.2	5.0 5.0 80*100	-1.328 -1.017 9.599 91.131
	TEN	61 85 96 -1.02 28			1	1110
F00 H1 . W . W W	WS (W/S)	1.17 1.31 1.35 1.53 1.53 3.15	TE CO		-1.07 23 1.94 07H/02	0373
SIS 5. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	MO DEG!	95. 94. 99.	MS (M/S)	1.02	2.48 2.83 2.83	0596 0596 0373 0169
	1 1					
C -4.4 C -10.0 ) 60 HI 10 TOTL 10 4268 HI 7622 P= .15 HW/CM2 .21*(16M)13.38 (08 SERVED DATA) 1.13*(16M) *****	SIGE (DEG)	3.1	\$16E (DEG)	2.3	2.8 3.0 8.I	8888
I I-W*	\$16A (DEG)	8 9 5 8 8 7 8 8 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 8 9 7 8 9 8 9	SIGA (DEG)	7.5	7.7	2.169 7.438 26.738 21.384
SERVICE SERVIC	TEN CC	-4-58 -4-58 -4-58 -3-08 -3-08	TEMP (C.)	-4.93 -4.79 -4.52 -3.93	!	-
MEATH TEMP DE POINT DE IBILITY ( MID 0.0 0.2 B= 0.0 0.35* (8M 192N) .8 192N) .8	N/S)	1.58 1.91 2.41 3.26 1.97			, , ,	.1534 .1628 .1816 .1594
MEAT TEMP D DEW POINT D VISIBILITY DIN MID LOW MID A= .02 B= 0.04 (4M) .035 * (8 (4M) .130 * (4M) .130 * (8 (4M) .130 * (4M	VO DEG)	155. 150. 152. 124. 126.	HS (M/S)		2.51 2.79 2.97 00/02	.0399
	1 - = 1				.	
5.0 1.1 0 TOTL 10: HI 7622 : 0.02 2 16M)***** : (16M)***** :	\$16E (0EG)	1228	\$16E	2 6 7 4	5.7 8.7 8.7	8888
1 T-W	SIGA (DEG)	8 8.0 8 5.0 7 16.7 8 10.8	S1GA (DEG)	5.1 6.6 7.5	-13	. 317 1.267 1.595
C C C C C C C C C C C C C C C C C C C	CE	13.28	TEMP (C)	0 - 55	7 7 7	22 22 28 200
MID WID WE SEE SEE SEE SEE SEE SEE SEE SEE SEE	MS (M/S)	44 49 8 9 3 4 4 4 4 9 8 8 9 9 4 4 4 4 9 8 8 9 9 9 9	TEM (C)	-6.17	1.44 1.42 1.42 DTH/02	.3968 .3414 .2305 .0900
MEATHER TEMP DEG C VISIBILITY (MI) DW MID 4 H LOW MID 4 H LOW MID 4 H (4M) 26*(8M)** (4M) 3.17*(8M)** (4M) 3.17*(8M)**	: WD	171. 1 156. 2 132. 2 177. 1 251. 1	LEAST SQUARES FITTED DATA  . WS HEIGHT (M) : (M/S)	1.84	1.93	.0076 .0039 .0020
			ES			
S NOI O	£	1. 2. 4. 8. 32. 48.	SQUARE (M)	1.0 8.0 0.0 0.0	000	6.0
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (1/L)*10 USTAR	HE I GHT	1. 2. 4. 8. 32. 48.	LEAST	1.24.8	32.0	8.0 16.0 39.5

200000000000000000000000000000000000000			-	-			-					-				
	. DA	TE 17/	11/20/	TIM	DATE 17/02/77 TIME 10:00:00	00:	TAC :	DATE 17/02/77		TIME 11:00:00	00:0	0 :	: 04TE 17/02/77		TIME 12:00:00	: 00:0
			WEATHER	8				1 H	WEATHER				3	WEATHER		
	••	TE	TEMP DEG (	0	3.3			TEMP DEG	0 EG C	7.2			TEMP	TEMP DEG C	10.0	
	0	EN PO	DEM POINT DEG	0	1-6-7		3G	DEW POINT DES	DEG C	-5.5			DEW PLINT DEG	DEG C	-5.5	••
	>	VISIBILITY	ITY (	CIW	70		1	VI SIBIL ITY (MI	(IW)	85			VISIBILITY (MI)	(IW) A	85	
CLD (TENTHS)	-10	-	4 CIN	Ï	101 01	101	HOT:	OIW	IH +	10 TOTL 10	TL 10	107:	31"	IH + 0	10 TOTL	TL 10:
CLO HT (M)	LOM:		MID	MID 4270	1 HI 7622	22	HOT :	*	410 427	4270 HI	7622	MO1 :	3	*ID 42	4270 H!	7622 :
NET RADIATION			14.5	1 MM/	CM2			23	23.58 MW/CM2					15.75 MW		
EXPONENTS	: A=	+0.	B= .	24 P=	•00		= V :	-9 90.	-21 P=	01.		: A:	-05 R=	. 17 P=	01.	
RICHARDSON NO.:	*) :.	41-7-	M8 ) 65	1 -22.	1 (16M)	.35.0	44)	167 (	841-1.6	3(16M)	89		(4M)-1.36 (8M)-4.05(16M)-9.18	(8M)-4.	-(m91)50	: 81.6.
	: (3	9.192	1131.9	2 (08:	(39.192M)31.92 (DBSERVED DATA):	DATA	(39	19241	BC 1 00.	SERVED	DATAI		(39.192M)-8.01 (08SFRVED DATA)	101 10.8	SSFRVEN	DATA!
(1/1)*10	+) :	21- (M	(4M) -19.9 (8M)	1 -27	7.6 (16M) -21.9:	-21.5	M+)	(4M)-1.81 (8M)-2.16 (164)46:	8M1-2.1	6 (164	1 46		(441-3.61 (8M1-5.32 (16M)-6.02	(8M1-5.	32 (16M)	-6.02:
USTAR		M).15	(4M).1528 (8M)	-	641 (16M) .1466	.1466	14 C + N	(4M).1123 (8M).1126 (16M).0935:	8M).112	M91) 9	1.0935	-	(44).1143 (8M).1204 (16M).1236:	(84).12	M91) 50	.1236:
	9	0	N.S.	TEND	•	SIGE	2	!	!	SIGA	SIGE		1			S16F :
HEISHT (M)	:(056)		_	3	(DEG)	(DEG): (DEG)	930)	(M/S)		(0) (0)	(066):(066)	101:	(S/W) (9:		(0) (0)	: (990)
1.				3.76					40.					7.50		
2.	: 216.		.93	3.80	17.0		. 280.		6.04	24.6			45. 1.0		4 21.3	
+			1.02	3.60												••
.8	: 21		1.04	3.41	12.9	11.11		. 1.26					10. 1.14			17.8:
16.	: 206		1.12	3.30	11.8	14.0:	267.			1 22.7	16.1:		22. 1.2		3 20.5	20.1:
32.	: 20		1.10	3.18	17.0	17.8										21.5:
48.	61 :		90-1	3.11	19.8	16.2										24.8:
					*******											

LEAST SQUARES FITTED DATA	RES	FITTED	DATA													
		MS			SIGE		MS	TEM		SIGE		MS	TEN	×	SIGE	
HEIGHT (M)	**	(M/S)	(0)	(DEG)	(DEG)	••	(M/S)	(3)	(DEG)	(050)	••	(M/S)	(3)	(990)	(056)	
1.0	"	46.	3.74		7.0		1.04		22.2	8.3		96.		21.0	12.4	
2.0	••	16.	3.71	14.2	8.2	••	1111	00.9	23.0	9.6	••	1.03	1.34	21.7	14.0	••
4.0	••	1.00			9.7	••	1.19	-	23.9	===	••	1.10		22.4	15.7	••
8.0	••	1.03			11.5	••	1.27	•	24.9	12.8	••	1.17		23.1	17.7	••
16.0	••	1.06			13.6	••	1.36		25.8	14.8	••	1.25		23.8	19.9	••
32.0	••	1.09			1.91	••	1.45	•	26.8	17.2	••	1.34		24.6	22.4	••
48.0	••	1:1			17.8	••	1.51		27.5	18.7	••	1.39		25.1	24.0	••
	"	20/00	DU/DZ DTH/DZ	BU*100	8.1	-	20/00	DTH/DZ	BU*100	RI		Zd / NG	DTH/02	8U*100	ı	
4.0		1010.	0217		13		.0265	0134	535	18		.0242			31	
8.0	••	.0052	6910	-3.611	65	••	.0142	0093	-1.299	82	••	.0129	0193	-3.153	-2.52	••
16.0	••		0072		+1.14	••	.0076	1100	0.540	34	••	6900.		•	14.90	••
39.2*	••	0025	•0029	26.173	00.	••	00000	.0125	30.810	00.	••	*****		-	25.45	••

	•		į	
	1	١		
	1	ľ		
	1	Ć	•	
	Ì	L	t	
	1			
			ì	
	ı	Ú	Ĺ	
			,	
	•	Ö		

CLD HT (M) :  EXPONENTS :  NET RADIATION :  RICHARDSON NO.:  (1/L)*10 :  USTAR :		MID 66 MID 4 MID 68 MID	C 1 70 H1 1 4268 P= MW/CM 3.361 1015	10.5 -5.5 10 TDTL 10: HI 7622: .07: (16M)-9.38: ERVED DATA): (16M)-6.15:	974	TEMP DEW POINT VISIBILITY ON MID LOW MID A= .05 B= 23 (4M)39 ( (39.192M) 2 (4M)-1.06 ( (4M)-1.06 (	MID 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C 1 20 1 4268 P= MW/CM 1.06( 0885 E 1201	1.7 4.4 0 TOTL 10: 14 7622: 14 822: 16M)-2.04: 16M)-1.35: (16M)-1.35:	D 74 5555	TEW POIL ISIBIL 09 M)9 M) -2.6 M) -198	THE DEG DEG WE WE WAY IN TO WE	70 1 -1 1 -1 1 -1 1 -1 0 08 SE 0 08 SE	3.3 6.1 0 TOTL 10 HI 7622 .05 2 16M)-6.79 RVED DATA) (16M)-4.46
HEIGHT (M) :(	: ND	WS TEM	TEMP SIGA	A SIGE	1	WD 0663 (*	WS T	TEMP SISA	A SIGE	1	WO WS DEG) (M/S)	TEMP	P SIGA	SIGE (DEG)
1. 2. 4. 8. 16. 32. 48.	299. 294. 292. 281. 275. 290.		10.12 10.13 21.5 10.07 20.7 9.96 19.3 9.64 10.4 9.41 12.0	15.		302. 295. 301. 304. 1314.	1.15	12.76 12.71 12.57 16.57 16.57 16.57 16.30 11.90 11.90	18.1 16.4 16.3 17.0 14.4 19.5 16.8 20.1 22.1		349. 1.83 349. 2.05 346. 2.15 336. 2.22 346. 2.22	13.34 13.24 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06 13.06	34 24 10.7 26 9.3 92 7.4 67 7.5 65 8.4	7.3
HEIGHT (M) :	MS (M/S)	DATA TEMP	SIGA	SIGE (DEG)		WS (M/S)	TEMP (C)	WP SIGA	\$16E (DEG)		WS (W/S)	TEMP	SIGA (DFG)	SIGE (DEG)
1.0	.88 .92	1	27.2 22.9 19.2	12.0		1.07	12.71 12.69 12.69		4.5		986	3.23	10.3	5.4
8.0 16.0 32.0 :	1.02		16.2 13.6 11.4 10.3	14.8 15.9 17.0		1.58		17.	10.4 13.7 18.1 21.2		2.07 1 2.15 1 2.23 1 2.28 1	13.04 12.86 12.60 12.48	7.50	7.9 8.9 10.1
. 0.91 . 0.91	20/U0 9910. 01860.	207HT0 0083 0057	BU#100 485 -1.572 -4.392	81. -13 -5.54		0427	.0237 0237 0172	BU*100	-1.92 -9.06		0.02430	-0169 -0141 -0085	80*100 232 723 -1.612	103

OBSERVED DATA	TA																	
		DATE 1	MEATHER MEATHER TEMP DEG C DEM POINT DEG C	-	ME 16:0 13.3 -5.0 70	16:00:00			17/02/77 WEATHER TEMP DEG POINT DEG	TIME C C C C	17:00:00 12.8 -4.4	00:	DEW	ATE 17/02/77 WEATH TEMP DE DEW POINT DE	THER DEG C DEG C	WE 18:0 -5.04 85	18:00:00	
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO. (1/L)*10 USTAR		.0W MI LOW A=18 B (4M)43 (39.192M) (4M)-1.17 (4M).1851	0 11 #		- T-W	0 TOTL 10 HI 7622 .08 2 16M)-3.26 RVED DATA) (16M)-2.14	0	MI MI CW = .00 B: 4M) .81 339.192M); 4M)26.87	A 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	HI -8 15 P= . 1 MW/CM2 1 .98(1) * (0BSER 75.75 (	18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10 18 10	7622 :: 2.70 :: DATA) :: 1.0210:	LOW LOW (4m) (39.00)	MID MID NOW A MI	HI	1 X-W	6 TOTL 6 41 7622 19 2 16M) 7.32 RVED DATA (16M) *****	
HEIGHT (M)		: WD	WS (M/S)	TEMP (C)	STGA (DEG)	SIGE (DEG)		WD DEG) (M	WS T	TEMP (C)	SIGA (DEG)	SIGE :	(DEG)	SA S	TEMP (C)	SIGA (DEG)	SIGE (DEG)	1
-1 -2		359.	1.89			9	: 32	321.	1 64.	12.67	8.9		210.	1.10				
4 8 9 4 32 6 8 4		349. 347. 345.	2.35	13.2	36 13.0 21 12.6 14 11.6 88 9.1 65 7.4	66.9		311. 303. 304.		12.75 12.71 12.78 12.55	6.9	8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	214. 221. 215. 209.	2.27 2.25 2.25 2.17	10.50 11.87 12.41 12.50	0 4.9 1 5.8 8.1 8.1	. 4	
LEAST SQUARES HEIGHT (M) :	ES	FITTED DATA WS (M/S)	DATA	TEMP	SIGA (DEG)	S I GE		WS WS	1EMP (C)		SIGA DEG) (	SIGE :	1 3	M/S)	1 1 2	SIGA (DEG)	SIGE (DEG)	1 1
1.0		1.85	1		16.6	8 8		14.	12.72		00	4.7			9.98	8 8	==	1
4.0 8.0 32.0 48.0		2.06 2.17 2.29 2.41 2.41	5555		13.0 11.6 10.2 9.1	0.0000		. 53 . 60 . 68 . 77 . 83	12.74 12.74 12.72 12.60 12.34		00000	5.8 7.10 8.4 8.4 8.4	222	1.56 10 1.78 10 2.02 12 2.31 13 2.49 11	10.12 10.98 12.28 13.22	8.7. 6.7. 6.9.	74.7.69	
													-					

\* OBSERVED DATA

8888

5.301 13.273 22.191 -7.696

.0387 .1900 .0387 .1900 .0220 .1035

.0118 2.297 .00 .0092 5.581 .00 .0040 7.622 .00 -.0025 -20.690-173.83

.0223 .0126 .0372

-.07 -.28 -1.63 -6.31

--212 --659 -1.608

.0361 -.0164 .0190 -.0142 .0100 -.0096 -.0013 -.0044

4.0 8.0 16.0 39.2

DU/DZ DTH/DZ 8U\*100

2

DU/DZ DTH/DZ BU\*100

2.5

BU\*100

00/10Z 01H/0Z

	••	DATE	DATE 17/02/77	TT TIME	4E 19:00:00	: 00:0	DATE	17/02/77 TIME	7 TIME	20:00:00	: 00:	DATE	17/02/17	TIME	TIME 21:00:00	00:
	••		MEA	WEATHER		••		WEATHER	HER				WEATHER	4ER		
	••		TEMP DEG C	DEG C	1.9	••		TEMP DI	2 95	4.4			TEMP DE		0.5	100
	**	DEW	DEM POINT DEG	DEG C	-7.2	••	DEW	DEW POINT DEG C	ين د	-7.8		DEW	DEW POINT DEG C	- 3 9E	-10.5	
	••	VIS	IBILITY	VISIBILITY (MI) 50	20	•	VISI	VISIBILITY (MI) 20	(MI) 20		••	VISI	VISIRILITY (MI) 20	IMI) 20		
CLD (TENTHS)		*COM	MID	н	-4 TOTL	TL 4:	LOW	OIW	H	101	: 0 7	MO7:	MIC	H	-1 TOTL	1 7
CLD HT (M)		107 :	Σ	MID	IH	229	MOJ :	GIM	0	Ħ	••	LOW	LOW MID		ī	7622
EXPONENTS	••	A= -	.23 8=	A=23 B= .19 P=	-			.28 B=	-95 P=	01	••	A= -	.16 B=	=d 65'	60.	
NET RADIATION	 Z		-1	-7.28 MW/C		••		-7.28 MW/CM2	28 MW/C	MZ	•		-6.4	-6.91 MW/CM2	M2	
RICHARDSON NO.:	0	( H+)	2.03 (	8M1 5.5	(4M) 2.03 (8M) 5.55(16M)11.45	11.45 :	( M+)	(4M) 1.27*(84)*****(16M)*****	*****( h	* (M91)	****	( M )	(4M) .57*(8M)2.22*(16M)40.57	412.22*	(164)4	0.57
	••	(39.	139.192M) 1	1.07 (085	SSERVED	ERVED DATA):	(39.1	192M112.	13 (085	ERVED	DATA):	(39.	192M)	5801 94	ERVED	DATAL
(1/1)*10	••	(4M)		(8M)****		*****	( W+)	63.4*(8	*****(N	(16M)	*****	( M )	13.8* (8)	*195.6*	(164)	*****
USTAR	•	( M+)	.0210	(4M).0210 (8M).0092		1.0051:	(4M).	021* (8	M) . 000C	(164)	:0000	(4M).	(164).0051: (4M).021* (8M).0000 (16M).0300: (4M).059* (8M).026* (16M).3333:	4).026*	(16M)	.0000
	"	OM :	MS	TEMP	SIGA	SIGE :	3	MS	TEMP		SIGE : WD	CE		TEMP	SIGA	S15E
HEIGHT (M)		:(DEC)	(N/S)		-		(DEG)	(M/S)	(3)	(0) (0)	(DEG): (DEG)	(DEG)	(M/S) (C) (DEG) (DEG)	00	DEGI	(050)
1.	"			3.83	3				4.20					69.		
2.	••	276.	1.73	5.87	6.11 7	••	45.	66.	5.26	18.8	••	109.	1.67	1.75	18.6	
.+	••	269.	2.30		1 8.7	•	38.	1.42	61.9	17.0	••	112.	2.23	3.66	14.3	
8	••	273.	2.67		7.5	1.9:		19.1	7.52	18.2	4.3:		2.87	5.58	8.6	6.
16.	••	258.	2.27		1.4	3.1:		1.53	8.06	18.9	7.6:		3.04	7.00	7.0	6.
32.	••	236.	2.60	10.37	6.8	3.0:	21.	1.21	8.34	32.0	14.0:	104.	2.82	8.65	8.8	1.2:
67	•		100							-						

		••	SM			SIGE	••	SM	TEMP		SIGE	••	SM	TEMP	SIGA	SIGE
HEIGHT (M)	3	••	(M/S)	(3)	(050)	(DEG)	••	(M/S)	3	(DEG)	(DEG)	••	(M/S)	(3)	(050)	(930)
1.0			1.71	5.50	13.2	1.5		1.29	5.27	12.0	9.		1.92	1.66	16.7	.2
2.0		••	1.89	5.83	11.3	1.7	••	1.29	5.50	14.6	1:1	••	2.05	2.11	14.9	.3
4.0		••	2.10	94.9	9.6	1.9	••	1.28	5.93	17.8	2.1	••	2.19	2.96	13.4	.5
6.8		••	2.33	7.62	8.2	2.2	••	1.28	6.71	21.7	4.1	••	2.34	4.50	12.0	
16.0		••	2.59	64.6	7.0	2.5	••	1.28	7.95	26.3	7.9	••	2.50	16.9	10.1	1:1
32.0		••	2.87	11.40	5.9	5.9	••	1.27	9.11	32.1	15.3	••	2.66	44.6	9.6	1.6
48.0			3.05	10.89	5.4	3.1	••	1.27	8.51	35.9	22.5	••	2.17	8.60	0.6	2.1
			DU/DZ	DTH/02	80*100	۳ 1		20/00	DTH/D2	80*100	RI		70/00	DTH/D2	801*100	۵. ا
4.0			.0731	.3092	3.931	00.		0016	.2126	7.238	00.		.0479	.4092	4.847	.00
8.0		••	90400	6192.	10.768	00.	••	80000-	.1783	24.391	00.	••	.0255	.3446	14.244	.00
16.0		••	.0225	+191.	22.198	00.	••	+0000	1601.	00.210	00.	••	.0136	.2156	30.989	00.
39.2	*	••	6990	.0681	41.862	00.	••	-10106	10394	63.718	00	•	0444	0242	90 4 66	00

\* OBSERVED DATA

	: DATE	DATE 17/02/77	۲	IME 22:00:00	00:0	DATE	11/	7 TIME	53:0		DATE 1	: DATE 18/02/77 TIME 00:30:00	TIME	00:00	: 00:
		MEA	MEATHER				WEATHER	HER		•		WEA THER	ER		•
		TEMP DEG C	) EG C				TEMP D	EG C	-1:1-	••		TEMP DEG	၁ ၅	-3.9	
	. DEM	DEM POINT DEG C	DEG C	+.6-		DEW :	DEW POINT DEG C	2 93 EG C	-8.9	•	DEW P	DEW POINT DEG C	- 29	5-01-	•
	: VIS	VISIBILITY (MI)		20		: VISI	VISIBILITY (MI)	(MI) 20	•	•	VISIB	IL ITY (	MI) 20		••
CLD (TENTHS)	*COM	MID	-	TOTL	7.0	FOM.	MIO	H	TOTL	TL 0 :1	MO.	MID	ī	TOT	. 0 7
CLD HT (M)	*07 :	I	MID	1/4		LOW	MID	0	Ŧ	••	LOW	MID		Ŧ	••
EXPONENTS	- =V :	A=20 B= .12	.12 P=	.31		: A=	05 B=	.37 P=	•36	•	A=0	08 R=25 P=	25 P=	94.	
NET RADIATION	••	9-	-6.91 MW/CM2	CM2			9	56 MW/C	.M2	••		-5.79	9 MW/CM2	M2	
RICHARDSON NO.	( H+) :	14.		.87(16M)	1.31	( 4M)	-		.91(16M) 1.59	1.59 :	(4M) 2	2.92 (8M)		5.45(16W)	8.43 :
		(39.192M)	.93 (08	OBSERVED DATA)	DATA)	: (39.1	139.19241	.00 (08	SERVED	DATA):	(39.19	(39.192M)****		(OBSERVED DATA)	DATA) :
(1/1)*10	( M+) :	(4M) 7.28 (	3M115.3	M91) 01	116.86	_	7.92 (8	M)16.56	W91) 9	124.57:	**(W5)	***** (N91) ***** (N6) ***** (N4)	*****(	(164)	*****
USTAR	: (4M)		3M) . 055	(8M).0556 (16M).0496:	1.0496		[4M].0663 (8M).0498 (16M).0407	M) .0498	W91) 8	: 1040.	(4M).0	(4M).0037 (8M).0028 (15M).0026:	1.0028	(184)	.0026:
	Q¥	N.S.	TEMP	SIGA	SIGE :	Q#	SM	TEMP	SIGA	SIGE: WD	GM	N.S.	TEMP	SIGA	\$16E :
HEIGHT (M)	: ( DEC)	(M/S)	3		(DEG): (DEG)	(DEC)	(M/S)	3	(DEG)	(DEG):(DEG)		(N/S)	(3)	(DEG)	(DEG):
1.			04.					80					-3.54		
2.	: 122.	1.63	96.			: 107.	1.52	47	8.6		73.	•33	-2.14	59.9	
+.	: 114.	2.31	1.68			. 86	2.07	16	7.6	••	28.	.73	.29	14.8	••
8.	: 119.		3.17				2.80	.70	5.2	2.1:	58.	.71	.87	12.9	1.7:
16.	: 119.		5.81				4.21	4.09	8.9	2.3:	97.	.57	1.28	25.0	14.0:
32.	: 120.	4.28	5.90	7.0	2.3:	: 129.	4.48	7.23	9.9	2.9:	153.	1.65	2.39	13.6	1.4:
48.	: 133.	4.39	5.76				4.48	7.68	7.2	4.2:	136.	1.74	4.32	19.1	2.1:
LEAST SQUARES FITTED DATA	S FITT	ED DATA													
								:					1	!	
	••	MS.	TEMP	SIGA	SIGE	SH		TEMP	SIGA	SIGE :	SI		TEMP S	SIGA	SIGE

HEIGHT (M)		WS (W/S)	TEMP (C.)	SIGA (DEG)	\$16E		(M/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		WS (W/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)
1.0	1 .	1.52	99.	11.8	1.5		1.27	-1.13	7.8	6.	!	72.	-1.96	22.3	6.3
2.0	••	1.89	1.03	10.2	1.6		1.64	74	7.5	1:1	••	.37	-1.70	21.1	5.3
4.0	••	2.35	1.74	8.9	1.8	••	2.10	.03	7.3	1.5	••	.51	-1.20	19.9	4.4
8.0	••	2.92	3.02	7.8	1.9	••	2.70	1.46	7.0	1.9	••	.71	27	18.8	3.7
16.0	••	3.64	5.01	6.8	2.1	••	3.47	3.88	6.8	2.5	••	76.	1.31	17.8	3.1
32.0-	••	4.53	6.74	5.9	2.2	••	4.46	86.9	9.9	3.2	••	1.33	3.36	16.8	2.6
48.0	••	5.14	5.48	5.4	5.4	••	5.16	7.79	4.9	3.8	••	1.60	3.93	16.3	2.3
		20/00	DTH/DZ	BU*100	8.1		ZO/NO	DTH/D2	BU*100	R.I.		20/00	DTH/D2	BU*100	18
0.4	-	.1724	.3406	3.514	00.		.1775	.3753	4.867	00.		.0553	i	54.341	. 93
8.0	••	.1072	.2821	7.489	00.		.1140	.3303	10.329	00.	••	.0380	.2192 10	101.282	00.
16.0	••	1990.	1691.	11.252	00.	••	.0732	.2404	18.058	00.	••	.0261		56.864	00.
39.5*	••	6900.	.0013	.360	00.		00000	.0381	10.190	00.	••	9500.	-	48.911	00.

-
4
-
-
2
_
VED
-
•
>
~
4
V
4

0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S16F :	1.1:	: 19	- 86 - 1 8 5 L
03:30:30 3.3 13.3 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.	SI		\$16E (0EG)	r & c - 1
25 25 25 25 25 25 25 25 25 25 25 25 25 2	P \$164 (DEG)	39 01 10.3 15 11.5 57 8.4 39 6.9 98 2.6	SIGA (DEC.)	11.9
77 THER DEG OPEG OPEG OPEG OPEG OPEG OPEG OPEG OP	S TEMP S) (C)	0000 000	TEMP (C)	-5 43 -2 96 -2 96 -2 96 -2 96 -2 96 -2 96
TE 18/ EW POL ISIBIL 29 M) -3 M) 6.2 M) 6.2	WD WS	10831	(W/S)	1.01 1.20 1.43 1.70 2.03 2.42
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STGE : WD	236. 219. 5: 204. 5: 195. 1.0: 195.	GE :	
10	S16A S1 DEG) (D	11.4.6 2.8.0 3.8.0 8.8.0	34 SIGE 6) (DEG)	-
TIME C C C -11 C C -12 HI 25 MW/CM 1.49W (08SE (08SE 43.5*	TEMP SI	-4 - 9 4 -1 - 6 7 -1 - 6 7 -1 - 1 5 -1 - 8 1 2 - 6 6 3 - 6 6	IP SIGA	01860000
MEATH DE MID	WS WS	12.22.32.45.22.33.34.45.45.45.45.45.45.45.45.45.45.45.45.45	TEMP (C)	-3.98 -2.69 -2.69 -1.14 -1.34 3.87
DATE 18 DEW PO VISIBIO OW 0 LOW 0 LOW 0 (4M) (4M) (4M) 11 (4M) 11 (4M) 11	WD DEG)	159. 161. 158. 156. 150.	WS (W/S)	1.60 1.83 2.08 2.36 2.69 3.06
	SIGE :	1.3 1.4: 2.5:	SIGE :	2.00.2
-2.8 -11.1 25 -11.1 26 -11.1 27 -11.1 27 -11.1 29 -11.1 29 -13 4/CM2 -37(16M) 29.78 08 SERVED DATA 4*** (16M) *****	SIGA (DEG)	7 13.2 8 8.6 7 7.5 3 10.5 8 8.3	SIGA (DEG) (	13.3 10.2 9.4 8.6
T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TEMP ) (C)	2 -3.87 3 -2.75 0 -3.87 7 -3.87 8 2.13 8 3.75	TEMP (C)	-3.52 -3.51 -2.60 -1.47 2.89
	WS (M/S	77. 1.22 65. 1.83 81. 2.50 75. 2.17 82. 2.08 87. 2.05	WS M/SJ	1.42 - 1.55 - 1.70 - 1.86 - 2.03 2.22 2.34
5	: WD	77. 65. 81. 75. 82. 87.		
		ARES		
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO. (1/L)*10 USTAR	HEIGHT (M)	1. 2. 4. 5. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	HEIGHT (M)	1.0 2.0 4.0 8.0 16.0 32.0

8883

14.330 34.982 69.080 96.237

.5002 .4368 .3100

.0501

8888

5.499 14.270 27.633 46.971

.4395 .3460 .2189

.0897

3000

.2638 17.664 .1913 42.541 .1113 142.061

. .0507 : .0277 : .0152

8.0 16.0 39.2\* \* OBSERVED DATA

01#102 BU\*100

20/00

RI

DTH/02 BU\*100

20/00

81)\*100

DTH/DZ

20/00

DRSERVED DATA	4														
	. DAT	: DATE 18/02/77 TI		ME 04:00:00	••	DATE	18/02/77 TIME 35:00:00	TIME	05:00		: DATE	18/02/17		TIME 06:00:00	: 00:
		WEATHER	HER		••		WEATHER	IER		••		WEATHER	HEP		••
	••	TEMP D	DEG C	-5.6	•		TEMP DEG		-5.6	••		TEMP DEG C		-6.1	••
	: DE	DEM POINT DEG C		.12.2	••	DEW	DEW POINT DEG C		12.2	••	DEN	DUINT		-11.7	••
	: VI	VISIBILITY (MI)		25	••	VISI	BILITY		25	••	VISI	3 IL ITY		.5	••
CLD (TENTHS)	:10	O MID	1H 0	2 TOTL	2:	LOW	OIN O	IH 0	2 TOTL		2:LOW (	GIN O	IHC	O TOTL	:0
CLO HT (M)			0	HI 7622	. 229	LOW	IW	•	H1 76	7622 :	LOW	MID	0	H	••
EXPONENTS	••	.44 E	15	3	•	A=	04 8=05 P=	-0 50°	.03	••	A=	07 8=	.85 P=	01.	••
NET RADIATION	••	-9-	3/MW 16	I/CM2	•		-9-	-6.14 MW/CM2	M2	••		-6.14	14 MW/CM2	M2	
RICHARDSON NO.:		(4M) 1.04 (8M) 6.		24(16M)31.00	: 00.1	( W )	.34*(8)	.34*(8M)*****(16M)****	(16M) **	* ***	(44)	.15* (8M)		.51* (16M)37.86	7.86 :
		(39.192M) 9.		BSERVED DATA!	DATA):	(39.1	(39.1924)92.06 (OBSERVED DATA)	36 (085	ERVED (	SATA):	(39.1	32M) .		(OBSERVED DATA)	SATA):
(1/1)*10	. (4M	-	(8M)****	(16M)	(16M)*****:	(4M)	4M) 5.05*(8M)***** (16M)****	*****()	(16M)	*****	( W )	(4M) 1.17*(8M)		5.47* (16M)****	*****
					. , , , ,		001100	0000			1000	01+10	+000	11771	0015.
USTAR	**	(4M).0237 (8	(8M).0037 (16M).0006:	(104)	: 9000.	1 44	.0000.(mgl) 0000.(mg) x100.	0000	11011	:0000		21	(44).10/* (84).086* (164).0013;	(101)	
	9	SM	TEMP	SIGA	SIGE :	9	SM	4	SIGA	SIGE : WD	GM	MS	TEMP	SIGA	SIGE :
HEIGHT (M)	: ( DEC )	1 (M/S)	5	(DEC)	(DEG): (DEG)	0EG)	(W/S)	(0)		( DEG) : (	056)	(M/S)	(3)	(DEG)	(DEG):
1.			-5.97					-5.93					-7.06		
2.	. 99 :	. 1.31	-5.52	10.7	•	138.	.92	-5.50	8.5	••	165.	1.45	-6.86	8.2	
4.	: 67.		-4.22	12.9		117.	1.69	-4.25	6.9	••	158.	5.09	-6.31	6.5	••
.8	: 95.	. 1.30	-2.91	19.0	1.6:	115.	2.48	-1.83	3.0	1.2:	166.	3.24	-4.79	3.8	.8
16.	: 191		15.	15.6	3.4:	.66	1.37	.38	4.1	3.3:	149.	4.06	-1.93	4.6	.7:
32.	: 261.		3.52	36.0	1.2:	. 49	1.39	3.87	14.1	.8.	140.	3.33	.35	7.7	1.4:
48.	: 224.	38	5.04	0.94	3.3:	. 49	1.30	2.03	4.3	2.0:	172.	1.51	1.65	4.8	4.3:
	-														
LEAST SQUARES FITTED DATA	S FIT	TED DATA													

HEIGHT (M)		WS (M/S)	TENP (C)	P SIGA	SIGE (DEG)		WS (M/S)	TEMP (C)	P SIGA (DEG)	SIGE (DEG)		WS (W/S)	TEMP (C)	SIGA (DEG)	S16E
1.0		2.35	!		1.4		1.36	-5.73		1.8		1.89	-7.19	6.7	-
2.0	••	1.80	-5.38	9.6	1.5	••	1.39	-5.23	4.9	1.8	••	2.03	-6.81	6.3	.2
4.0	••	1.37			1.7	••	1.41	-4.28		1.7	••	2.18	-6.08	6.0	.3
8.0	••	1.05			1.9	••	1.44	-2.52		1.6	••	2.35	17.4-	5.7	9.
16.0	••	.80			2.1	••	1.47	94.		1.6	••	2.52	-2.38	5.4	1:1
32.0	••	19.			2.3	••	1.50	4.17		1.5	••	2.71	19.	5.2	2.0
48.0	••	.52			5.4	••	1.52	4.91		1.5	••	2.82	1.55	2.0	2.8
		20/00	DTH/02	BU*100	۳ I		20/00	DTH/DZ	BU*100	RI		ZG / NQ	DTH/D2	BU*100	ı.
4.0		1251	.4449 13.	13.809	00.		1600.	.4629	13.500	00.		.0519	.3608	4.438	00.
8.0	••	0477	.3922	83.102	00.	••	.0050	8404.	45.013	00.	••	.0279	.3186	13.523	00.
16.0	••	0182	.2867	412.985	00.	••	.0025	.2886	121.828	00.	••	.0150	.2341	34.179	00.
39.5*		0194	10501.	879.170	00.		0056	.0825	245.655	00.		1137	.0912	79.416	00.

	7622 7622 ***** 0 0474) 4) *****	7.7 5.2 2.8 4.3
TIME 09:00:00 C -1.1 C -7.8 ) 85	2 TOTL HI 76 01 12 16M)** RVED D (16M)*	nnoconi
TIME S C -	HI 2 P= #W/CM ( OBSE ( OBSE ( OBSE	C) (DEG)7291 101.07 -1.12 -1.169292939393
DATE 18/02/77 TS WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI)	::LOW	M.S. (M.S.) 1.06 1.16 1.17 1.18 1.09
DEW PC	DW 0 LOW A=10 (4M)-2. (4M)-7. (4M)-7.	
		SIGE: WD (DEG): (DEG) : 85. 22.8: 72. 22.7: 63. 4.0: 39.
DATE 18/02/77 TIME 08:00:00 WEATHER TEMP DEG C -5.6 DEW POINT DEG C -10.6 VISIBILITY (MI) 85	DW O MID O HI 2 TOTL 2:1 LOW MID HI 7622: A= .09 B=07 P=10 -0.00 MW/CM2 (4M) .76*(8M)33.22(16M)*****: (39.192M) 6.48 (OBSERVED DATA): (4M) 23.6*(8M)***** (16M)*****: (4M) .035* (8M).0010 (16M)*****:	000000
T TIME HER 56 C = 66 C = 78 C	0 H1 0 7 P= 00 MW/C 1) 33 - 22 +8 (08S 4) . 0010	C) (DE5) -5.68 -5.73 11.6 -5.75 11.3 -5.39 11.2 -3.35 43.9 1.49 20.5 2.04 8.1
MATE 18/02/77 TI WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI)	0 MID 0 HI 2 H *09 B=07 P=10 -0.00 MW/CM2 .76*(8M)33.22(16M) 192M) 6.48 (0BSERVE 23.6*(8M)***** (16	M.S.)
DATE 1 DEW P	0 : LOW 0 : LOW 0 : A = .0	WD (DEG) 84. 75. 77. 57. 57. 57. 57. 57.
	5.69 :: DATA): *****:	SIGE: (DEG): 19-1: 12-7: 12-5:
IME 07:00:00 -6.1 -12.2 30	0 TOTL ( HI -25 M2 (16M) 35.69 F(16M) 35.69 F(16M) 4.444	TEMP SIGA SIGE: WD (C) (DEG) (
HER HER EG C EG C	0 HI 25 P= 24 MW/CM (8M)!8.37( (8M)*****	TEMP (C) -7.25 -6.46 -5.81 -4.87 -1.27 -1.32
DATE 18/02/77 TI WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI)	LOW O MID O HI O TOTL O LOW MID HI  A =58 B =25 P = .25  -5.44 MW/CM2  (4M) 7.53 (8M)18.37(16M)35.69  (39.192M) .75 (0BSERVED DATA)  (4M)***** (8M)****** (16M)*******  (4M).0023 (8M).0011 (16M)******	.62 .65 .65 .84 2.10 1.55
DEN	_ i	#D : (DEG) : 109: : 169: : 208: : 180:
	20	
	CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION: RICHARDSON NO.: (1/L)*10 USTAR	HEIGHT (M)  1. 2. 4. 8. 16. 32. 48.

OBSERVED DATA

LEAST SQUARES FILLED DATA	2	בווובה	DAIA													
	"	S#	TEMP	P SIGA	SIGE		SM	TEMP	SIGA	SIGE		MS	TEMP	SIGA	SIGE	! "
HEIGHT (M)	••	(M/S)		-	(DEG)		(M/S)	(0)		(DEG)		(M/S)	(3)		(050)	. !
1.0		.55			11.7		1.82	-6.34	12.1	7.0		1.11	-1.18	7.6	17.0	
2.0	••	• 65			8.6		1.70	-6.07	12.9	1.9	••	1.12	-1.13	0.6	12.7	••
4.0	••	.78			8.3		1.60	-5.54	13.6	4.9	••	1.12	10.1-	8.5	6.5	••
8.0	••	.92			7.0	••	1.49	-4.53	14.5	6.1	••	1.13	75	7.9	7.1	••
16.0	••	1.10	-1.68	21.2	6.5	••	1.40	-2.68	15.3	5.8	••	1.14	01	7.4	5.3	**
32.0	••	1.30			6.4	••	1.31	.34	16.3	5.5	••	1.15	1.69	6.9	3.9	••
48.0		1.44			4.5		1.26	2.45	16.9	5.4		1.15	4.12	6.7	3.3	••
		20/00	DTH/02	BU*100	1.8		20/nd	DTH/02	BU*100	RI		20/00	DTH/DZ	B11*100	a T	! "
4.0		.0449	.4148	40.289	00.	!	.0353		6.121	00.	!	.0026		3.354	00.	!
8.0	••	.0267	.3595 98.	98.323	00.		5910.	.2482	26.031	00.	••	.100.	1980.	15.499	00.	••
16.0	••		.2491	191.040	00.		7700.		101.174	00.		10000		78.946	00.	••
39.2#	••	0419	6980	129.566	00.	.,	.0156	-	189.487	00	•	.0038	"	56.406	00	•

•	q	C
۱		
-	d	ľ
(		3
0		3
L	ı	į
1	>	•
C		
-	ı	ı
"	/	)
	ĭ	ì
5		3

	DA :	: DATE 18/02/77 TI	2/17	TIME	ME 10:00:00	: 00:	DATE	DATE 18/02/77	0	TIME 11:00:00		: DAT	: DATE 18/02/77		TIME 12:00:00	: 00:0
		TEME	TEMP DEG C		3.9	• •		TEMP D	ני ט				TEMP	טבט ט	4.6	
	0	DEM POINT DEG	T DEG	ی ر	-8.3	••	DEW	: DEW POINT DEG C	EG C	-7.2		DE	W POINT	: DEW POINT DEG C -7.2 :	-7.2	••
	>	VISIBILITY (MI)	TY (MI	_	-	••	VI SI	BILITY	(IM)	-		: 11	S181L1T	(IW) A	10	••
CLD (TENTHS)	*C7:	OIM O	1H 0 0	_	2 TOTL	~	LOW	O MID	IH O		3	MOT:	O MID	0 HI	3 101	.1 3:
CLO HT (M)	. LOM	_	MID		HI 762	22	LOW	IW	0	HI 7622		LOM:		MID	ī	: 229
EXPONENTS	: A=	17 8	21	11	P= .08		A=	A=00 B=05 P=	.05 P=			: A=	-11 8=	-06 P=	90.	••
NET RADIATION			21.77 MW	MWICH	12	••		29.	03 MW/	3.M2			3	3.00 MW	CM2	••
RICHARDSON NO.:		(4M)-1.16 (8M)-3.	- ( M8 )	3.54	54(16M)-8.38	3.38 :		9.40 (8	M1-30.	· (W91)+	-72.8	1 (4N	11-2.33	(8M)-7.	-(m91)08	. 17.9 :
		39.192MJ		( 08SE	ERVED C	ATA):		92M1-3.	50 (08	SERVED	DATA	: (39	.192M1	101	SERVED	SATA):
(1/1) *10	+) :	(4M)-3.09 (8M)-4.	(8M)-	4.66	4.66 (16M)-5.50:	.5.50:		24.7 (8)	M)-39.	3 (16M)	1-47.7	1 (4N	11-6-14	(8M)-9.	M91) 99	-11.7:
USTAR		[4M].1338 (8M).1397 (16M).1431:	( 8M).	1397	(16M).	1431:		(4M).1353 (8M).1314 (16M).1041:	M).131	4 (16M	1+01-0	. (4)	11-1417	(4M).1417 (8M).1499 (16W).1584	1911 6	.1584:
	9	S# O		TEMP S	IGA S	: 16E :	Q.	S.H.	TEMP	SIGA	SIGE	3	SI	TEMP	•	S16E :
HEIGHT (M)	: ( DEG )	(S/W) (9	(2) (5)		(DEC)	(DEG):(DEG)	(DEC)	(N/S)	(3)	(C) (DEG)	(DEG): (DEG)	: ( DEG	(M/S)	(0)	(C) (DEG)	(DEG):
1.			4	.74					7.51					9.38		•
2.	: 35		7 61	19.	23.8	••	328.	.77	7.42	39.5		: 351				••
+	: 345.	5. 1.34	34 4	.50	19.8	••		.91	7.42	37.6					, 26.9	
8.	: 355		4 44	• 36	18.1	12.6:	314.	.84	7.23	30.0	22.0:	: 295.	. 1.33	3 8.95		
16.	: 345	5. 1.52		.20	9.51	13.6:		.81	7.04	22.3						20.8:
32.	340			10.4	15.1	15.7:		.92	6.15	30.5					22.5	18.3:
48.	: 35			.73	13.2	18.8:		96.	6.58	49.5						23.0:

4
DATA
M
_
0
TED
Ξ
FIT
u
S
ES
ď
SOUAR
õ
S
-
IST

LEAST SQUARES FILLED DATA	2	בוונח	DAIA			1										
HEIGHT (M)		WS (M/S)	TEMP (C)	\$16A (DEG)	\$16E (DEG)		WS (M/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		WS (M/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)	
1.0		1.17		26.0	7.9		.77		34.2	28.3		1.14	9.26	31.2	16.6	!
2.0	••	1.24		23.1	9.1	••	.80		34.1	27.5	••	1.19	9.23	29.6	17.4	••
4.0	••	1.31		20.5	10.5	••	.83		34.0	26.6	••	1.24	91.6	28.0	18.2	••
8.0	••	1.39		18.2	12.2	••	.85		33.9	25.8	••	1.29	60.6	26.5	19.0	••
16.0	••	1.47	4.23	16.1	14.2	••	.88	7.04	33.8	25.0	••	1.34	8.84	25.1	19.8	••
32.0	••	1.56		14.3	16.4	••	16.		33.7	24.2	••	1.40	8.55	23.8	20.7	••
48.0	••	19.1		13.4	17.9	••	.93		33.6	23.8	••	1.43	8.40	23.1	21.3	••
		20/00	0U/02 0TH/02	BU*100	R I		20/NO	DTH/DZ	80*100	a.		Z0/NU	DTH/DZ	BU*100	٦.	! "
4.0		.0251	0208	679	16		0600.	0216	-1.771	15		.0171	0196	714	13	!
8.0	••	.0133	0178	-2.072	-1.22	••	.0046	0184	-5.658	-1.58	••	.0089	0167	-2.239	84	••
16.0	••	.0070	0118	-4.902	-7.48	••	.0024	0120-	0120-13.842	-27.03	••	9400.	0109 -5.383	-5.383	-4.18	••
39.5*	••	.0031	.00310075-16.9	1-906-91	114.10	••	.0025	0006	-3.821	16.91-	••	.0012	-00000-	13.849 -	16.66	••
																1

THER TO THE TOTAL THE TOT
HER 14 HER 14 HER 17 HER 17 HER 18 O HI 3 O HI 4 O HI 3 O HI 3 O HI 3 O HI 4 O HI 3 O HI 3 O HI 3 O HI 3 O HI 4 O
DATE 18/02/77 TIME  WEATHER  TEMP DEG C  VISIBILITY (MI) 77  DW  MID 1 HI 3  LUW  MID 4900 H  A=07 B= .15 P= .1

	_
	4
	-
	4
	u
	0
	W
	VED
+	œ
	SE
	S
	8

00	8 . 36	5.4: 5.4: 5.0: 5.0: 5.0:
TIME 15:00:00 C 3.9 C -12.2	HI TOTL 8: + F = .13 MW/CM2 17(16M)36: (OBSERVED DATA): 24 (16M)25: 24 (16M)25:	
3.9 -12.2	110 0 MID 17.37 MW/CM2 17.37 MW/CM2 16 (8M)17(10 1953 (0BSER) 19 (8M)24 (	1001
THER DEG C DEG C C (MI)	1 40.0 88.3 1 40.0 88.3 1 1 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
4/02/77 WEATHER TEMP DEG	DW 8 MID HI TOTL 8:  LUW 1370 MID HI  A=03 B= .04 F= .13  17.37 MW/CM2  (4M)06 (8M)17 (16M)36 :  (39.192M)53 (OBSERVED DATA):  (4M)18 (8M)24 (16M)25:  (4M) -4749 (8M) .4693 (16M).4694	MS (M/S) (M/S) 5.28 6.15 6.67 7.35 7.77 8.08
DATE 24/02/77 TII WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI)	(4M) - (6M) - (6	WD DEG) 345. 342. 330. 341.
 0	9:1 37 54503:	SIGE: WD (DEG):(DEG) 345, 335, 5.2: 342, 5.3: 330, 6.3: 341,
TIME 14:00:00 C 3.9 C -11:1	TOTU HI -15 42 (16M) (16M) (16M)	
TIME ER 6 C 6 C - 7 MI) 5	3 HI 3050 08 P= 08 P= 119 6 (CBS) 127 127	CC) (DEG) 4.48 4.24 13.4 3.97 13.0 3.47 13.3 3.13 12.2 2.77 10.0
DATE 24/02/77  WEATHER  TEMP DEG  DEW POINT DEG  VISIBILITY (MI	9:LOW 6 MID 3 HI TOTL 9:1 : LOW 1220 MID 3050 HI : A =08 B = .08 P = .15 : A =08 B = .08 P = .15 : (4M)07 (8M)19(16M)37 : : (4M)21 (8M)27 (16M)26: 1: (4M) -4449 (8M) -4568 (16M)26:	MS (M/S) 4.72 5.95 6.35 6.36 7.34 8.03
DATE 2	OW 6 LOW 1. (4M) - (4M)	
	9:L	SIGE: WD (DEG):(DEG) : 321. 310. 5.2: 317. 4.9: 306. 5.1: 303. 6.3: 314.
ME 13:00:00 3.3 -12.2 60	TOTL HI •16 (16M) (16M)	S1GA S (DEG) ( 14.4 13.4 13.4 12.0 10.6 9.8
Facca	3050 3050 39 P= 3 MW/CN 1-17 1-24 1-3488	3.25 3.09 2.90 2.90 2.31 2.03 1.81
ATE 24/02/77 T WEATHER TEMP DEG C DEW POINT DEG C	DW 8 MID 1 HI TOTL 9:LOW LOW 1525 MID 3050 HI : LON A=12 B= .09 P= .16 : A= . 25.33 MW/CM2 : A= .06 (8M)17(16M)32 : (4M (39.192M)08 (0BSERVED DATA): (39.192M)24 (16M)22: (4M (4M)19 (8M)24 (16M)22: (4M	MS 3.66 4.66 5.02 5.43 6.57
DATE 24/02/77 MEATHE TEMP DEG DEW POINT DEG VISIBILITY (**	0W 8 MID LOW 1525 A=12 B= 2 (4M)06 (4M)19 (4M)19 (4M)19	
	CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSGN NO. (1/L)*10 USTAR	11. 2. 4. 4. 8. 16. 32. 48.
	CLD (TEN CLD HT (1 EXPONENT WET RADIA VET RADIA VET RADIA VET RADIA VET RADIA VET RADIA	191

DATA
FITTED
SQUARES
Sos
LEAST
_

HEIGHT (M)		MS (M/S)	TEMP (C)	S IGA (DEG)	SIGE (DEG)		(W/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		WS (W/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)
1.0	1 .	3.48	3.12	16.1	4.1		4.55	4.30	14.7	4.3	-	5.01	3.56	13.7	4.8
2.0	**	3.89	3.06	14.8	4.3		5.04	4.20	13.9	4.6	••	5.48	3.49	13.4	4.9
4.0	**	4.36	2.94	13.7	4.6	••	5.58	4.03	13.2	4.8	••	5.99	3.36	13.1	5.0
8.0	••	4.88	2.71	12.6	6.4	••	61.9	3.70	12.4	5.1	••	6.55	3.10	12.8	5.2
16.0	••	5.47	2.34	11.6	5.5		6.86	3.17	11.8	5.4	••	7.17	2.68	12.5	5.3
32.0		6.12	1.90	10.7	5.5		7.60	2.59	11.11	5.7	••	7.84	2.17	12.2	5.4
48.0	••	6.54	1.86	10.2	2.1	••	8.07	2.63	10.8	5.8	••	8.26	2.10	15.1	5.5
		20/00	DTH/DZ	BU*100	۳. ا		20/00	DTH/02	80*100	RI		20/00	DTH/DZ	BU*100	R.I
4.0		.1646	0477	143	06		.1915	0736	134	04		.1789 -	0553	087	03
8.0	••	- 2260.	.0398	380	17		1961.	0612	362	19	••	. 3978 .	0465	246	09
16.0	••	- 9150-	0240	732	81		.0588	3366	736	75	••	.0535	0290	513	36
39.2*	••	-0400	.0038	531	87		.0431	0031	291	27	••	- 9610.	0056	492	53

Colored   Colo	CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (1/L)*10 USTAR		0 014 0000	MEATHER DECEMBER DECE	TIME C -1 C -1 I) 50 HI HI MW/CM -256 C08SE -355		8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	DATE 24  DEM P  VISIBILOW 3  LOW 12  A=07  (4M)  (4M)  (4M)	24/02/77 T WEATHER TEMP DEG C C BILITY (MI) 3 MID 4 H H 1220 MID 3 07 B =10	11 ME 3050 MW/C 108 S3 179 S179 S179 S179 S179 S179 S179 S179	7.00 0 DAT		DEW PCINT DEW PCINT OF STATE SALOS/17  VISIBILITY 2 MID  LOW 2 MID  LOW 1220 MID  A=43 B= -7  (4M) .12 (8) .12 (4) .12 (4) .12 (4) .12 (4) .12 (4) .12 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4) .13 (4)	HHERE TO SEE THE	1 30 1 30 050 050 050 050 050 060 060 060 060 06	18:33:33 1.1 0.6 TOTL 4 HI .34 2 2 16M) .36 RVED DATA) (16M) 1.40 (16M) 1.40
## 1.50	HEIGHT (M)	1	WD (DEG)	1	! -	1		-	WS. T	P S16	150	" "		WS T	d W	SIGE (DEG)
## 3.07 2.22 12.1	1.	"			2.28				1	10						
## 122		••	32.	3.07		2.1	•	29.	.75 1	01	.7	••		1.37	3	2
RES FITTED DATA  RES FITTED RES FIT TO	*	••		3.52		1:1		19.		6	8	••		181	0	
RES FITTED DATA  REMP SIGE : WS TEMP SIGE SIGE SIGE SIGE SIGE SIGE SIGE SIGE	. 8	•••		3.87		7.5	2000	28.		00	s o				<b>-</b>	
RES FITTED DATA    1.	32.	• ••	: :	4.29		6.0	4.9:	15.		0 00					u or	
## TEMP SIGE : #\$ TEMP SIGE: #\$ TEMP SIGE   #\$ TEMP	48.	**	30.	4.45	37	0.8	5.5:	27.	-	000		:				
1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00		ARES				1	10	3	T A	22	ic		3	T T		2012
: 2.96       2.20       11.9       4.5       : 3.42       1.97       10.8       6.3       : 1.14       .34       7.5         : 3.20       2.17       11.7       4.6       : 3.81       1.95       10.3       5.8       : 1.44       .34       7.5         : 3.45       2.11       11.5       4.7       : 4.25       1.92       9.8       5.4       : 1.82       .47       5.5         : 4.52       1.85       9.4       5.1       : 2.32       .71       4.1       5.5         : 4.02       1.80       11.2       4.8       4.7       : 2.94       1.07       3.0         : 4.34       1.52       10.8       5.2       1.73       8.5       4.4       : 3.73       1.32       2.2         : 4.54       1.40       10.7       5.2       6.26       1.30       8.3       4.2       3.73       1.32       2.2         : 0U/D       DIH/D       80.4       1.30       8.3       4.2       3.73       1.32       2.2         : 04/D       1.40       10.7       5.2       6.26       1.30       8.3       4.2       3.73       1.9         : 04/D       -0.90       -0.91 <td< th=""><th>PEIGHT (M)</th><th></th><th>S/W)</th><th></th><th>_</th><th>_</th><th>EG) :</th><th>(M/S</th><th>-</th><th>-</th><th>0 0</th><th></th><th>(M/S)</th><th>(3)</th><th>-</th><th>(DEG)</th></td<>	PEIGHT (M)		S/W)		_	_	EG) :	(M/S	-	-	0 0		(M/S)	(3)	-	(DEG)
3.20       2.17       11.7       4.6       3.81       1.95       10.3       5.8       1.44       .34       7.5         3.45       2.11       11.5       4.7       4.25       1.92       9.8       5.4       1.82       .47       5.55         3.72       2.00       11.2       4.8       4.73       1.85       9.4       5.1       2.32       .71       4.1         4.02       1.80       11.0       5.0       5.27       1.73       8.9       4.7       2.94       1.07       3.0         5.2       1.80       1.50       8.5       4.4       3.73       1.32       2.2         4.34       1.52       10.8       5.2       1.30       8.3       4.2       1.97       3.0         5.2       10.8       5.2       1.30       8.3       4.2       4.29       .96       1.9         5.2       10.0       5.2       1.30       8.3       4.2       4.29       .96       1.9         5.2       10.0       10.0       10.0       1.0       1.0       1.0       1.0       1.0       1.0       1.0       1.0       1.0       1.0       1.0       1.0       1.0	1.0		2.9		=	*	. 5	3.42	1				1.13	-		
3.45 2.11 11.5 4.7 : 4.25 11.92 9.8 5.4 : 1.82 .47 5.5 5   3.72 2.00 11.2 4.8 : 4.73 11.85 9.4 5.1 : 2.32 .71 4.1   4.02 11.80 11.0 5.0 : 5.27 11.73 8.9 4.7 : 2.94 11.07 3.0   5.27 11.73 8.9 4.7 : 2.94 11.07 3.0   5.27 11.73 8.9 4.7 : 2.94 11.07 3.0   5.28 11.00 5.0 : 5.27 11.73 8.9 4.7 : 2.94 11.07 3.0   5.29 11.00 5.0 : 5.0 1 11.00 5.0 : 5.0 1 11.00 8.3 4.2 : 4.29 .96 11.9   5.20 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00   5.20 11.30 8.3 4.2 : 0.0475 -0.057 -0.058 -0.03 : 0.0930 .0595 2.539   5.20 11.00 -0.037 -1.080 -2.24 : 0.0194 -0.050762 -1.33 : 0.0556 -0.006229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229229 -	2.0	••	3.2		_		: 9.	3.8		122	5.8	••	1.44			
3.72 2.00 11.2 4.8 : 4.73 1.85 9.4 5.1 : 2.32 .71 4.1 4.1 4.02 1.80 11.0 5.0 : 5.27 1.73 8.9 4.7 : 2.94 1.07 3.0 3.0 4.34 1.52 10.8 5.1 : 5.87 1.50 8.5 4.4 : 3.73 1.32 2.2 4.5 4.54 1.40 10.7 5.2 : 6.26 1.30 8.3 4.2 : 4.29 .96 1.9 1.9 1.9 1.00 0.091 0.091 0.091 0.091 0.095 0.005 0.009 0.091 0.095 0.005 0.005 0.0006 0.0006 0.229 0.0000 0.0037 0.099 0.559 0.54 : 0.0475 0.0057 0.058 0.0715 1.031 0.0556 0.0037 0.0057 0.0050 0.762 0.762 0.006 0.229 0.0056 0.0006 0.229 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.0006 0.00	4.0	••	3.4		_		. 1.	4.25			5.4	••	1.82		5.5	3.1
## 4.02   1.80   11.0   5.0   5.27   1.73   8.9   4.7   1.32   2.2   2.2   4.34   1.52   10.8   5.1   5.87   1.50   8.5   4.4   3.73   1.32   2.2   2.2   4.54   1.40   10.7   5.2   6.26   1.30   8.3   4.2   4.29   .96   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.9   1.	8.0	••	3.7		-		. 8.	4.7			5.1		2.32		4.1	5.4
### ### ##############################	16.0	••	4.0		_			5.2			4.7	••	2.94	-	3.0	6.1
## DU/DZ DTH/DZ BU*100 %1 : 0U/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100  ### 100	48.0	• ••	4.5		01			6.26					4.29		7.7	
: .0880019009104 : .1532006202001 : .1466 .0715 1.231 : .0475016026313 : .0854005705803 : .0930 .0595 2.539 : .0256009955954 : .0475004715307 : .0591 .0354 3.747 : .01000037 -1.080 -2.24 : .01940050762 -1.38 : .00560006229 -		1.	20/00	DT H/D2	90		. 1	20/00	DTH/	80*100	1 -	-	10	i	811×100	
: .0475016026313 : .0854005705803 : .0930 .0595 2.539 : .0256009955954 : .0475004715307 : .0591 .0354 3.747 : .01000037 -1.080 -2.24 : .01940050762 -1.38 : .00560006229 -	4.0		.0880	1	160		. 40	.1532		020	10	-	.1466	.0715	1.231	00.
: .0256009955954 : .0475004715307 : .0591 .0354 3.747 : .01000037 -1.080 -2.24 : .01940050762 -1.38 : .00560006229 -	8.0	••	.0475				13 :	.0854	•	058	03	••	. 3930	.0595	2.530	.00
- 6.2* : .01000037 -1.080 -2.24 : .01940050762 -1.38 : .00560036229 -	16.0	••	.0256	•	i		: +5	.0475	•	153	07	••	1650.	.0354	3.747	00.
のでは、「一日の日の日の日の日の日の日の日の日の日の日の日の日の日の日の日の日の日の日の	39.5*	••	0010	•	0-1-	'	: 42	*610°	•	762	-1.38		.0056	0006	229	37

CBSERVED DATA

DATE 24/02/77 TIME 19:00:00 : DATE 24/02/77 TIME 20:00:00 : WEATHER   HEATHER   HEATHER   HEATHER   TEMP DEG C -10.6   TOTAL 1   MID 20   MID 3050 HI   MID 305			
HEATHER  HEAP DEG C -0.6  LOW POINT DEG C -10.6  LOM 3 MID 3 HI TOTL 6:L  LOM 1220 MID 3050 HI  A = .04 B = .26 P = .34  N : (4M) .18 (8M) .39(16M) .63 :  (4M) 1.70 (8M) 3.28 (16M) 4.08 :  (4M) 1.70 (8M) 3.28 (16M) .0629 :  (4M) 0826 (8M) .0686 (16M) .0629 :  (DEG) (M/S) (C) (DEG) (DEG) :  296. 1.30 -1.08 24.3  297. 3.19 .05 29.3 3.9:  308. 3.39 .36 29.0 5.2:	TIME 19:00:00	TE 24/02/77 TIME 20:	30:00 : DATE 24/02/77 TIME 21:33:03 :
TEMP DEG C -0.6  UISIBILITY (MI) 30  LDM 3 MID 3 HI TOTL 6:L  LDM 1220 MID 3050 HI  A = .04 B = .26 P = .34  D.: (4M) .18 (8M) .39(16M) .63:  (4M) 1.70 (8M) 3.28 (16M) 4.08:  (4M) 0.826 (8M) .0686 (16M) .0629:  WD WS TEMP SIGA SIGE:  (DEG) (M/S) (C) (DEG) (DEG):  290. 1.30 -1.08 24.3  290. 1.6685 24.3  297. 3.19 .05 29.0 5.2:		WEATHER	: MEATHER
. DEW POINT DEG C -10.6 . VISIBILITY (MI) 30 . LDM 3 MID 3 HI TOTL 6:L . LDM 1220 MID 3050 HI . A = .04 B = .26 P = .34 . 18 (BM) .391 (bM) .63 : . (39.192M) .50 (DBSERVED DATA): . (4M) 1.70 (BM) 3.28 (16M) 4.08: . (4M) .0826 (BM) .0686 (16M) .0629: . WD WS TEMP SIGA SIGE: . (DEG) (M/S) (C) (DEG) (DEG): . 296. 1.30 -1.08 24.3 . 290. 1.6685 24.3 . 301. 2.3653 26.9 4.2: . 297. 3.19 .05 29.0 5.2:	: 9.0- :	TEMP DEG C -1.7	: 1EMP DEG C -0.6
. VISIBILITY (MI) 30LOM 3 MID 3 HI TOTL 6:LLOM 1220 MID 3050 HIA= .04 B= .26 P= .34 N. = .04 B= .26 P= .34 O.: (4M) .18 (8M) .391 (6M) .63 : (4M) 1.70 (8M) 3.28 (16M) 4.08: (4M) .0826 (8M) .0686 (16M) .0629: MD WS TEMP SIGA SIGE : (DEG) (M/S) (C) (DEG) (DEG): 296. 1.30 -1.08 24.3 297. 3.19 .05 29.3 3.9: 308. 3.39 .36 29.0 5.2:	DEG C -10.6 :	POINT DEG C -10.6	: DEW POINT DEG C -8.3 :
LOW   3 MID   3 HI   TOTL   6:LDM   1220 MID   3050 HI   3050 HI	(MI) 30 :	ISIBILITY (MI) 20	20
LDM   1220 MID   3050 HI   34   34   34   34   34   34   34   3	3 HI TOTL 6:	I MID 2 HI T	JTL 3:LOW MID 10 HI TOTL 10:
A	3050 HI	4 1220 MID 3050 HI	: LOW MID 3050 HI :
(4M)   18 (8M)   39(16M)   63 : (39.192M)   50 (085ENVED DATA) : (4M)   1.70 (8M)   3.28 (16M)   4.08 : (4M)   0826 (18M)   0629 : (4M)   0826 (18M)   0629 : (4M)   0826   0829 : (4M)   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   0829   082	.26 P= .34 :	18 8=23 P= .22	: A=22 B=16 P= .33 :
(4M) .18 (8M) .39(16M) .63 : (39.192M) .50 (0BSERVED DATA): (4M) 1.70 (8M) 3.28 (16M) 4.08: (4M) .0826 (8M) .0686 (16M) .0629: (DEG) (M/S) (C) (DEG) (DEG): (296. 1.30 -1.08 24.3 : 290. 1.6685 24.3 : 297. 3.19 .05 29.3 3.9: 308. 3.39 .36 29.0 5.2:	/CM2 :	-3.28 MW/CM2	: -3.98 MW/CM2 :
: (39.192M) .50 (0BSERVED DATA): : (4M) 1.70 (8M) 3.28 (16M) 4.08: : (4M) .0826 (8M) .0686 (16M) .0629: : (4M) .0826 (8M) .0686 (16M) .0629: : (4M) .0826 (8M) .0686 (16M) .0629: : 296 (475) (C) (466) (466): : 298 (4.27	18M1 .39(16M) .63 :	M91)10. (M8) 10. (P	.02 : (4M) .03 (8M) .07(16M) .12 :
: (4M) 1.70 (8M) 3.28 (16M) 4.08: : (4M).0826 (8M).0686 (16M).0629: : WD WS TEMP SIGA SIGE: : (DEG) (M/S) (C) (DEG) (DEG): : 298. 1.30 -1.08 24.3 : 290. 1.6685 24.3 : 301. 2.3653 26.9 4.2: : 297. 3.19 .05 29.3 3.9: : 308. 3.39 .36 29.0 5.2:	.50 (OBSERVED DATA):	3.192M) 02 (OBSERVE	DATA1: (39.192M) .01 (CBSERVED DATA):
: (4M).0826 (8M).0686 (16M).0629: : (DEG) (M/S) (C) (DEG) (DEG):( : 298. 1.30 -1.08 24.3 : 290. 1.6685 24.3 : 301. 2.3653 26.9 4.2: : 297. 3.19 .05 29.3 3.9: : 308. 3.39 .36 29.0 5.2:	18M) 3.28 (16M) 4.08:	41 .02 (8M) .02 (16	() .02: (4M) .11 (8M) .17 (16M) .20:
: WD WS TEMP SIGA SIGE: WD WS : (DEG) (MEG) (DEG) (DEG) (M/S) : 298. 1.30 -1.08 24.3 : 319. 3.54 : 290. 1.6685 24.3 : 310. 4.43 : 301. 2.3653 26.9 4.2: 317. 5.01 : 297. 3.19 .05 29.3 3.9: 305. 5.54 : 308. 3.39 .36 29.0 5.2: 304. 6.60	18M). 0686 (16M). 0629:	4).3104 (84).3159 (16	4).3191: (4M).1109 (8M).1109 (16M).1137:
: (DEG) (M/S) (C) (DEG) (DEG): (DEG) (M/S)  : 298. 1.30 -1.08 24.3 : 319. 3.54  : 290. 1.6685 24.3 : 310. 4.43  : 301. 2.3653 26.9 4.2: 317. 5.01  : 297. 3.19 .05 29.3 3.9: 305. 5.54  : 308. 3.39 .36 29.0 5.2: 304. 6.60	TEMP SIGA	E.S.	SIGE : WD WS TEMP SIGA
: 298. 1.30 -1.08 24.3 : 319. 3.54 : 290. 1.6685 24.3 : 310. 4.43 : 301. 2.3653 26.9 4.2: 317. 5.01 : 297. 3.19 .05 29.3 3.9: 305. 5.54 : 308. 3.39 .36 29.0 5.2: 304. 6.60	(C) (DEG)	( (W/S)	(DEG):(DEG) (M/S) (C) (DEG) (DEG):
296. 1.30 -1.08 24.3 : 319. 3.54 : 290. 1.6685 24.3 : 310. 4.43 : 301. 2.3653 26.9 4.2: 317. 5.01 : 297. 3.19 .05 29.3 3.9: 305. 5.54 : 308. 3.39 .36 29.0 5.2: 304. 6.60	-1.27	79	: -2.55
: 290. 1.6685 24.3 : 310. 4.43 : 301. 2.3653 26.9 4.2: 317. 5.01 : 297. 3.19 .05 29.3 3.9: 305. 5.54 : 308. 3.39 .36 29.0 5.2: 304. 6.60	-1.08 24.3 :	3.5473	: 301. 1.22 -2.48
. : 301. 2.3653 26.9 4.2: 317. 5.01 : 297. 3.19 .05 29.3 3.9: 305. 5.54 : 308. 3.39 .36 29.0 5.2: 304. 6.60	85 24.3 :	4.4374	: 292. 1.77 -2.49
. : 297. 3.19 .05 29.3 3.9: 305. 5.54 . : 308. 3.39 .36 29.0 5.2: 304. 6.60	53 26.9 4.2:	5.01	4.7: 297. 1.94 -2.50 6.6
308. 3.39 .36 29.0 5.2: 304. 6.60	.05 29.3 3.9:	5.54 79	4.1: 287. 2.59 -2.49
	.36 29.0 5.2:	6.6093	3.3: 291. 3.08 -2.55 4.4
. 332. 3.73 .30 25.1 6.7; 315. (.51	.30 25.1 6.7:	7.51 -1.12	3.2: 304. 3.72 -2.70 4.2

LEAST SQUARES FITTED DATA	ES	FITTED	DATA													
		SM			SIGE		MS	TEMP	SIGA	SIGE		NS	TEMP	SIGA	SIGE	**
PEIGHT (M)	••	(8/8)	(3)	(050)	(DEG)		(M/S)	(3)	(DEG)	(DEG)		(M/S)	(3)	(DEG)	(DEG)	" !
1.0		1.08			2.2		3.12	76	7.9	7.7		1.02	-2.51	8.6	4.7	••
2.0	••	1.37			2.7	••	3.64	76	7.0	6.5	••	1.28	-2.51	8.4	4.2	••
4.0	••	1.73	06		3.2	••	4.24	76	6.2	9.6	••	1901	-2.50	7.2	3.8	••
8.0	••	2.19			3.8	••	46.4	77	5.5	4.7	••	2.02	-2.49	6.2	3.4	••
16.0	••	2.78			4.6	••	5.76	80	4.8	4.0	••	2.54	-2.49	5.4	3.0	••
32.0	••	3.52	.48	27.5	5.5	••	6.71	92	4.2	3.4	••	3.20	-2.55	4.6	2.7	••
48.0	••	4.04		28.0	1.9		7.34	-1.12	3.9	3.1	••	3.65	-2.70	4.2	5.6	••
		20/00	DT H/ 02	BU*100	۳ - ۲		Z0/N0	DTH/D2	BU*100	¥		20/00	DTH/02	8U*100	۳ - ا	! " .
4.0		1181.	.0960	1.842	00.		.2170	.0081	.026	00.		.1236	.0130	.290	00.	! "
8.0	••	.0872	.0818	3.908	00.	••	.1265	9900.	.062	00.		.0776	.0112	.634	00.	••
16.0	••	.0552	.0533	6.345	00.		.0737	.3036	660.	00.	••	.0488	1100.	1.096	00.	••
39.5*	••	.0213	-0062	2.740	00.		. 6950	6100	211	-114	••	0040	90000	.307	00.	••
	-	******											*******			!

(1/L)*10 USTAR	Z 9	(4H) (4H) (4H) (4H)	TY (MI) MID 10 M	C -0.6 C -9.4 I) 20 HI TOTL 3050 HI 2 P= .36 MW/CM2 .09(16M) (0BSERVED D .27 (16M)	TL 10:17 DATA):	DEW P VISTB LOW LOW A=2 (4M) (4M).19	TEMP DEG POINT DEG BILLITY (MI MID 10 MID 27 8=34 -3.63 .04 (8M) 192M) .17 .18 (8M)	C -1.7 C -8.9 ) 20 HI TOT 3050 HI P= .31 NW/CM2 .10(16M) (085ERVED .30 (16M)	TL 10:11	TEMP DEW POINT VISIBILITY DW MID LOW MID A=23 R= -2 (4M) .01 (39.192M) (4M) .3587	10 10 10 10 10 10 10 10 10 10 10 10 10 1	-1.1 20 11 20 11 8050 HI P= .20 .04(16M (OBSERVE .07 (16	071 10 0 007 0 0044) 0 007
HEIGHT (M)	1	(DEG) (	MS M/S)	TEMP SIGA	SIGE :	ND (DEG)	WS TE	MP SIGA	SIGE :	WD (DEG)	WS T (S/	EMP SIGA	SIGE (DEG)
1. 2. 8. 16. 32. 48.		304. 295. 301. 294. 303.	2.20 -1 2.20 -1 2.60 -1 3.31 -1 4.34 -1 5.34 -1	-2.09 -1.97 11.0 -1.91 10.7 -1.85 10.6 -1.69 10.1 -1.49 8.4	2.8:	339. 330. 339. 331. 337.	2.36 -1 2.74 -1 3.56 -1 4.44 -1 5.07 -1	-1.96 -1.86 9.7 -1.70 9.4 -1.56 6.6 -1.51 1.55	3.2. 2.8: 2.3:	343. 334. 341. 329. 1343. 843.	22 00 60 36 143	1.53 1.43 7.4 1.38 6.8 1.34 5.9 1.33 4.7 1.51 3.7	44 6 6
LEAST SQUA	SQUARES	FITTED WS (M/S	DATA TEMP	SIGA (DEG)	SIGE :	WS (W)	TEMP	SIGA (DEG)	SIGE:	MS (M/S)	TEMP (C)	\$ 164 (DEG)	SIGE (DEG)
0.000			-2.03	12.3	1.6.4	1.50	36 -1.89 31 -1.81	13.5	- 6.24 - 6.34	3.70	11.46	0.0	1.00
32.0 48.0		3.44		4.88	2.9	N W 4 W		- 4 m m	2.1	6.48	-1.33	9.4.6	3.51
4 0	" "	20/00	.0360 .0350	8U*100 .480	1 000	1677		8U*100 .364	1 000	22293	.0207	80*100	1 000
39.5			.0250	1.952	000	0640	020	1.512	888		4110.	.250	000

													-	-	-
	: DAT	DATE 25/02/77	TI	ME 01:00:00		DATE	: DATE 25/02/77 TIME 02:00:00	TIME	05:00	: 00:	DATE 2	DATE 25/02/77		TIME 03:00:00	: 00:
		WEATHER	ď				WEATHE	IER		••		WEATHE	TER		••
		TEMP DEG C		-1.7	••		TEMP DEG C		-2.2	••		TEMP DE		-2.8	••
	: DE	DEW POINT DEG C		9.01-	••	DEM	POINT DE		+.6-	••	DEW P	DINT DE		-8.9	
	: 115	VISIBILITY (MI)		20	••	VISI	VISIBILITY (MI)	[MI] 20		••	VISTR	VISIBILITY (MI)	(MI) 2	0	
CLD (TENTHS)	FOM:	3 MID	7 HI	TOT	1:01 7	MO.	2 MID	7 HI	TOT	1:01	OW 2	OIW	LOW 2 MID 4 HI TO	TOT	. 9
CLO HT (M)	. LOM	: LOW 1525 MID 3	305	3050 HI	••	LOW	1525 MID	3050	Ï	••	LOW	525 MIL	3050	H	••
EXPONENTS	: A=	26 8= -	.32 P=	.22	••	A= -	25 8=	.33 P=	.22	••	A= 1	8 B= -	.53 P=	•56	
NET RADIATION		-4-	-4.33 MW/CM	2	••		-7.2	26 MW/C	12	••		-7.6	3/MW 15	42	
RICHARDSON NO.:	( wt) : .	.02		.04(16M)	: 60.	( M )	.03 (8)	10. (1	[ 16 M)	.14:	(44)	.05 (84	11. (*	( M91)	. 22 :
		(39.192M) .	_		DATA):	(39.1	92M1 . C	38 (085)	FRVED L	SATA):	(39.19	2M1 4.4	12 (085	ERVED C	DATA):
(1/1)*10	( M+) :	.05		(W91) 6	.13:	(H+)	.11 (8)	11 .20	(16M)	.28:	( W)	18) 61.	(4M) .19 (8M) .37 (164)	(16%)	.69.
USTAR	. (4M	(4M).3287 (8	M).318	(8M).3185 (16M).2984:	. 5884:	(4M)	4: (4M).3024 (8M).2817 (16M).2587: (	41.2817	(16M).	. 2587:	(44).2	18) 809.	(4M).2608 (8M).2414 (16M).2167:	(164)	2167:
	GN	S.X	TEMP	SIGA	SIGE: WD	Q <b>M</b>	E S	TEMP	SIGA	SIGE :	03	E S	TEMP	SIGA	165 :
HEIGHT (M)	:(DEC)	(M/S)	(3)	(DEC)	(DEG):	(DEC)	(M/S)	(C) (DEG) (DEG):(DEG)	DEGI	(DEG):(		(M/S)	(C) (DEG) (DEG):	056)	1930
1.			-1.90					-3.09					-4.39		
2.	: 349		-1.79		••	8		-2.94	6.9	••	357.	3.33	-4.24	7.7	
+	: 340		-1.71		••	359.		-2.79	5.9	••	347.	3.95	-4.03	1.4	••
.8	: 347		-1.64		.9.4	9		-2.66	5.5	4.7:	355.	4.80	-3.79	6.3	3.6:
.91	: 334		-1.61		4.0:	352.		-2.53	4.6	3.7:	343.	00.9	-3.43	5.3	2.2:
32.	: 335.	. 7.34	-1.61	3.5	3.3:	353.	7.04	-2.48	3.4	3.0:	346.	7.14	-3.01	6.4	1.0:
48.	: 348		-1.70		2.5:	5.		-2.56	3.1	5.6:	-:	7.31	-2.95	4.6	1.7:

OBSERVED DATA

LEAST SOUARES FITTED DATA	RES	FITTED	DATA					ē								
		S.M.	TEMP		SIGE		SI	TEMP	SIGA	SIGE		S.W.	TEMP	SIGA	SIGE	
HEIGHT (M)		(M/S)	(0)	(DEC)	(DEG)		(M/S)	(3)	(DEG)	(DEG)		(M/S)	3	(050)	(050)	••
1.0		3.41		8.2	9.3		3.22	-2.97	8.4	9.3		2.79	-4.30	8.9	7.6	!
2.0	••	3.98	-1.80	8.9	7.5	••	3.76	-2.94	7.1	7.4		3.35	-4.23	7.9	6.1	••
4.0	••	4.63		5.7	0.9	••	4.39	-2.86	0.9	5.9	••	10.4	-4.10	7.0	4.6	••
8.0	••	5.39		4.7	4.8	••	5.13	-2.74	5.0	4.7		4.81	-3.84	6.2	3.2	••
16.0	••	6.28		3.9	3.8	••	6.00	-2.54	4.2	3.8	••	5.17	-3.43	5.5	2.2	••
32.0	••	7.31		3.3	3.1	••	10.7	-2.40	3.6	3.0	••	16.9	-2.96	4.9	1.5	••
48.0	••	7.99		5.9	2.1	••	7.68	-2.59	3.2	5.6		1.69	-2.97	4.5	1.2	••
		20/00	DTH/DZ	BU*100	٦ ٦		Z0/N0	DTH/DZ	80*100	R.I.		20/00	DTH/D2	RU*100	1.8	!
4.0		.2360	.0265	.071	00.		.2232	.0432	.130	00.		.2439	.0748	.271	00.	!
8.0	••	.1374	.0228	181.	00.	••	.1339	.0367	.323	00.		.1462	.0654	.659	00.	••
16.0	••	.0800	.0154	.361	00.	••	.0783	.0239	919.	00.	••	.0876	.0468	1.309	00.	••
39.2*	••	6940.	***********	.412	000	••	.0463	.0050	.512	00.	••	9010.	.0138	1.471	00.	••
*	BSER	* OBSERVED DATA	A													!

	: DAT	: DATE 25/02/77 TI		ME 04:00:00		DATE	: DATE 25/02/77		TIME 05:00:00		DATE	: DATE 25/02/77		TIME 06:00:00	: 00:0
		MEATHER	HER		••		WEATHER	HER		••			WEATHER		•
		TEMP DEG C	DEG C	-3.9			TEMP DEG	EG C	-3.9	••		TEMP	DEG C	-3.3	••
	3G :	DEM POINT DEG	DEG C	-8.9	••	DEW	POINT DEG	ں	10.0	••	DEW	DEW POINT DEG	DEG C	-111-1	••
	· .	VISIBILITY (MI)	(IW)	20	•	VISI	VISIBILITY (MI	_	20	••	VISI	VISIBILITY (MI	CIM	20	•
CLD (TENTHS)	*C7:	2 MID	4 HI	T01	.9 7	MOT	1 MID	2 HI	TOTL	3:	LOW	OIW 1	2 HI	TOTL	1. 3:
CLO HT (M)	*C7 :			50 HI	••	F07	1525 MID	0 3050	H	•	LOW	1525 MID	10 3050	50 HI	•
EXPONENTS	: A=	A=14 8=59 P	=d 65.	.33	•	1	.22 B=29	-4 67.	.35	•	A=	14 B=	57 P	42	
NET RADIATION			-3.63 MW/	/CM2	•		-5-	79 MW/C	. W2	•		-5	44	MW/CM2	•
RICHARDSON NO.:	( MT) :	0.		13(16M) .31	. 31 :	( M )		68M) .16			( KH)	191.	2	30(164)	: 14.
	: (39	(39.192M)	=	SERVED	DATA!	(39.1	92M1 .	34 (095	CORSERVED	-	(39.1	92M1	90	I OBSERVED DATA!	DATA!
(1/1)*10	( 4M) :	.25	4. (MB) 6	(M91) 65	1.08:	(4M) .38	_	18M) .67	(M91)	:66.	( M )	: (4M) 1.39 (8	=	2.08 (164	1.83:
USTAR	** (4%	(4M).1528 (8	(8M).142	0	•	(4M).		(8M).1314	(W91) t	.1246:	(44)	,0931 (	3	(M91) 7680	-
	OM .	S.E.	TEMP	SIGA	SIGE :	GX	E.S.		SIGA	SIGE :	3	MS	TEMP	SIGA	SIGE :
FEIGHT (M)	: ( DEG )	(M/S)	(3)	(DEG)	(DEG): (DEG)	(DEG)	(M/S)	(3)	DEG)	(DEG): (DEG)	(DEG)	(M/S)	(3)	(DEG)	(DEG):
1.			-5.28					-5.40					-7.21	1	
2.	: 309	. 1.76	-5.21	7.9	•	357.	1.79	-5.25	12.2	••	331.	1.32			••
**	: 298.		-5.20	7.0	••	348.	2.27	-5.06	11.8	•	319.	1.90			••
8.	: 305	. 2.80		4.9	3.7:	355.	2.93	18.4-	10.1	2.4:	327.	2.48			1.7:
16.	: 294			4.7	2.1:	343.	3.74	-4.48	4.6	1.5:	321.	4.00			1.4:
32.	: 304.	+1.4	-4.01	3.9	1.3:	344.	4.63	-4.15	7.8	1.3:	320.	4.15	-4.74	4 4.1	.8.
48.	: 322		-3.91	9.9	1.4:	357.	2.41	-3.95	5.8	1.5:	332.	5.18			:9.
LEAST SQUARE	S FIT	TED DATA													
LEAST SQUARES FITTED DATA	S FIT	TED DATA													

HEIGHT (M)		(R/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		WS (W/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		(S/w)	TEMP (C)	\$16A (DEG)	\$16E	
1.0		1.43	!	8.3	11.6		1.41	-5.30	15.4	3.9	!	1.04	-7.09	5.2	1.9	! "
2.0	••	1.86	-5.29	7.5	7.7		1.80	-5.24	13.3	3.2	••	1.39	-6.93	4.7	4.1	••
6.4	••	2.35		8.9	5.1		2.28	-5.12	11.4	5.6		1.87	-6.62	4.3	2.8	••
8.0	••	2.95		6.2	3.4	••	2.93	-4.89	8.6	2.1	••	2.51	-6.07	3.9	1.9	
16.0	••	3.71		9.6	2.3	••	3.69	-4.52	8.5	1.7		3.37	-5.20	3.5	1.2	
32.0	••	4.67		5.1	1.5		4.70	-4.06	7.3	1.4	••	4.52	-4.42	3.2	8.	••
48.0	••	5.35		4.8	1.2		5.40	-3.99	1.9	1.3	••	5.37	06.4-	3.0		••
		20/00	DT H / D2	80*100	۳ ا		20/00	DTH/D2	BU*100	2		20/00	DIHIDZ	BU*100	18	! "
4.0		.1813	.0490	.521	00.		.1847	.0676	.758	.00		.1861	.1529	2.572	00.	!
8.0	••	1411.	.0472	1.266	00.	••	.1174	.0000	1.663	00.	••	.1249	.1282	4.778	.03	••
16.0	••	.0713	.0435	2.949	00.		1410.	8 + + 6 .	3.059	00.		.0833	.0787	6.495	.00	••
39.2*	••	.0293	.0163	3.740	00.		.0487	.0225	5.073	00.	••	.0544	6900.	1.312	00.	••
*	BSER	* OBSERVED DATA	-			!				-	1			-		!

d
F
4
0
_
0
w
>
0
SE
S
8
-

	. 041	יייייייייייייייייייייייייייייייייייייי	3W1 - 61:	00:10		DAIL	STATE CALLETTE US:US:US	I I ME	00:00		DAIE	17016	DAILE COLUCTION INTE US: UD: UD	00.60	000
		TIND OLD	מביני לי	,			TIND DOC	, LI V				T T T T T	Y		
		THE CO	200	10.5		2	THE CO	ر د	7.7		200	J AFE	VOL O DEO TATO ESO .	***	
		יייייייייייייייייייייייייייייייייייייי	1 1 1 1 1 1	0.01	• •	200	20 - 110 - 100	2	1.4.		NICE OF STATE	2111	יייייייייייייייייייייייייייייייייייייי	1.1.1	
		1017111	C TIMI		•	1011	017111	0 11	0	•	11210	11711	0 (11)	•	
CLD (TENTHS)	:10M	O MID	8 HI	TOT	1:8	10	O MID	JH Z	O TOTL	7:1	MO	OIN	I H I	0 191	7
CLD HT (M)	107 :	E W	D 3050	H C	••	LOW	MIC	3050	H	••	LOW 1	070 MI	0 3050	Ħ	
EXPONENTS	: A= -	.13 8= -	.35 P=	.25	**	A= .	07 8=	=d 01.	.28	••	A=1	.0 B=	-0 50.	.12	
NET RADIATION		-1-	OS MW/C	MZ	••		3-1-	31 MW/C	M2	••		11.2	31 MW/C	MZ	
RICHARDSON NO. :		.02 (8	M) .05	( 16M)	.111	( M )	.03 (8)	10. (1	(16M)	.17:	- (M+)	03 (8	C1 (M	(16M)	21
		192M)	14 (085	ERVED L	DATA1:	(39.1	5. (M26	1 (085)	ERVED D	ATA):	(39.19	12M)	30 1085	ERVED !	DATA
(1/1)	( 4M) :	8) 90.	M) . 10	(164)	.17:	( W )	.10 (8)	41 .18	(16M)	. 39:	- (M4)	8) 11.	MI - 14	(164)	15
USTAR	: (4M)	(4M).1576 (8M).1515 (16M).1438: (4M).1364 (8M).1323 (16M).1201: (4M).4779 (8M).4649 (16M).4592:	IM). 1515	(16M).	1438:	(4M).	1364 (8)	11.1323	(164).	1201:	644).4	8) 6114	M) . 4649	(164)	4592
	9	E S		SIGA	SIGE :	S.	N.S.	TEMP	SIGAS	16E:	Q.	N.S.	TEMP	SIGA	3918
HEIGHT (M)	:(DEG)	(M/S)	(3)	(050)	(DEG): (DEG)	( DEG )	(M/S)	(C) (DEG)	066) (	(DEG): (DEG)	DEG.)	(M/S)	(C) (DEG)	DEG)	(DEG):
1.			-4.94					-4.32		••			-1.75		
2.	: 30.		-4.92	6.2	••	316.	1.62	-4.26	21.0	••	345.	5.43	-1.85	7.5	
•	: 21.	2.22	16.4-	5.7	••	305.	1.98	-4.25	21.0		336.	6.30	-2.02	7.0	
8.	: 29.		-4.92	4.8	4.5:	313.	2.41	-4.25	6.12	3.5:	343.	6.88	-2.19	6.5	4.5
16.	: 15.	3.15	-4.95	4.5	3.3:	303.	2.98	-4.26	23.6		331.	7.32	-2.39	5.2	4.6
32.	: 15.		-5.02	4.0	2.7:	310.	3.63	-4.23	25.2		331.	7.79	-2.61	5.6	4.4:
48.	: 25.	4.36	-5.11	4.3	2.4:	330.	3.92	-4.25	25.4		344.	8.16	-2.84	5.1	5.1

	6
-	
	_
	۹
	_
•	_
	_
C	
L	L
	0
•	•
21111	•
	-
	1
۰	۰
L	1
•	
C	X
	а
1041100	•
:	ï
•	d
¢	,
۰	
•	
	1
	d
L	

HEIGHT (M)		WS (W/S)	TEMP (C)	S I GA	S16E		WS)	TEMP (C)	S I GA	SIGE (DEG)		(M/S)	TEMP	STGA (DEG)	SIGE (DEG)
1.0	-	1.58	14	6.7	9.0	1.	1.34	-4.28	19.5	4.1		5.19	-1.84	7.9	4.0
2.0	••	1.89	-4.92	6.1	7.1		1.63	-4.28	20.4	3.8	••	5.65	-1.88	7.4	4.1
4.0	••	2.25	-4.92	5.6	9.6		1.98	-4.27	21.4	3.6	••	41.9	-1.96	6.9	4.3
8.0	••	2.69	-4.93	5.1	4.4		14.2	-4.26	22.5	3.4		6.67	-2.11	4.9	4.4
16.0	••	3.21	-4.95	4.6	3.4	••	2.94	-4.24	23.6	3.1	••	7.25	-2.36	6.0	4.6
32.0	••	3.82	-5.01	4.2	2.7		3.57	-4.23	24.7	5.9	••	7.88	-2.70	5.5	4.7
48.0	••	4.24	-5.11	4.0	5.4		4.01	-4.25	55.4	2.8	••	8.28	-2.81	5.3	4.8
		20/10	OTH/02	BU*100	<u>«</u>		20/00	DTH/DZ	BU#100	2		201no	DTH/OZ	BU*100	12
4.0		.1331	.0087	.100	00.		.1306	.0130	.192	00.		- 1709 -	.0280	043	03
8.0	••	.0794	.0080	.258	00.		.0795	.0124	964.	00.		- 6260.	0235	122	05
16.0	••	.0473	.0005	965.	00.		.0484	2110.	1.212	.00	••	- 9050.	9410	257	12
39.5*	••	.0344	7700	1.492	00	•	1810	10087	3.463	00.		- 1550	7700	285	- 20

4	
-	
PO	
_	
W	
>	
a	
SF	
S	
8	

		9	MEATHER TEMP DEG	ي ن ر	9.0			3 3 4 5	TEMP D	WEATHER MP DEG C	9.0			TE PO	WEATHER MP DEG C	2.26	
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (1/L)*10 USTAR		. VISIBILI: LOW 915: LOW 915: A=07 B: (4M)05: (4M)15: (4M)15:	23. X1. X1. X1. X1. X1. X1. X1. X1. X1. X1	SER EICIG	0 0 0 HI 0 HI 6(16 6(16 5 CH 2	1 2 2 0 0 A T 55			1220 MI 1220 MI 02 B=	ESE SE O O SE SE E	85 0 0 HI /CM2 25(16 85ERV 85ERV 35 (1	2 2 M)52 ED DATA) 6M)35 6M)35	LOW	181LITY 5 MID 1220 M •12 B= 36 09 ( 192M) -		85 0 0 HI CCM2 27(16 85 ERV 37 (1	2 2 M)54 ED DATA) 6M)37 6M1.5099
HEIGHT (M)		: WD	WS (W/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)	1	ND DEG )	WS (M/S)	TEMP (C)	SISA (DEG)	SIGE (DEG)	: WD	WS (M/S)	TEMP	S16A (DEG)	SIGE (DEG)
-1				00						1.40						_	
2.		347.	6.54	19				335.	5.24	1.18	60	*	: 346.	5	1.74	4 13.	
	• ••	344.	8.21		-	4		332.	6.65		. 6			-		11.	
16.	••	331.		-1.07	5			320.	7.29	•	8	5.4	: 332	7		3 10.	
32.		342.	9.27	-1.35	7.3	5.3		318.	1.51	29	8 6	5.5	332.	8.08	1.0	10.	3 6.2
LEAST SQUAR	RES	SQUARES FITTED DATA	DATA														
	••	MS			SIGA	SIGE	••	S.M.		W	SIGA	SIGE	••		TEMP	SIGA	SIGE
HEIGHT (M)	-	(N/S)		-	DEG)	(DEG)	-	(#/S			(DEG)	(DEG)	2			(DEC)	(DEG)
1.0	••	6-59	•		8.2		••	5.06		.23	9.6	5.9		5.44 1	.79	•	4.4
2.0	•• •	18.9			8.4	4.5		2.5		41,	4.6	•		-	69.		9.4
200	• •	7.99	' '			4.0		7.0		. 65	6.6	2.4			16	17.7	
16.0	• ••	8-65	'		2 . 5	4.8	•	7.0		14	0.0				57		2.4
32.0		9.37			5.5	4.9		7.7	'	94	8 . 8			•	90	6.6	5.7
48.0	••	9.8			4.9	2.0	••	8.1	'	94	8 . 8				010		5.8
		DU/02	DTH/02	BU*	*100	8.1		20/00	DTH/DZ	8	0+100	RI	20/NO :	DZ 0TH/DZ		PU*100	1 4
4.0	••	.1960	0536	•	150	03		.1690	070		.113	04	: .17	50 0810	01	.113	05
8.0	••	1901.		'	162	07	••	6160.	,	-	.320	13	60. :	4190 0560		318	13
16.0	••	.0574	0272	'	.335	30	••	.0500	1	-	064		: .05	•		645	54
29.74	••	.0144		1		23	••	.0313	•	•	1461	19	: .02	31		.456	75

	: DAT	DATE 25/02/17	=	4E 13:00:00	: 00:0	DATE	25/02/77		TIME 14:00:00	: 00:	DATE	DATE 25/02/77		TIME 15:00:00	00:0
		WEATHER	æ		••		WEATH			••		WEAT	HER		
		TEMP DEG C	DEG C	2.26	••		TEMP DE	J	3.9	•		TEMP DEG C	DEG C		
	: DE	DEW POINT DEG	DEG C	-8.3	••	DEW	DEW POINT DEG	J	4.6-	••	DEW	DEW POINT DEG			
	I VI	VISIBILITY (MI	_	85	••	VISI	VISIBILITY (MI	8	2	••	VISI	VISIBILITY (MI	(MI) 85	2	
CLD (TENTHS)	.LOM	5 MID	O HI	O TOTL		LOW	S MID	IH 0	10T 0	1 5 :	LOW 5	MID		O TOTL	7 5
CLD HT (M)	. LOW	1070 MID	0	Ŧ	••	LOW	915 MID		I'm	••	LOW	LOW 915 MID	0.	H	
EXPONENTS	: A=	A=04 B=	-15 P=	=:	••	A=	06 B= .12	12 P=	11:	••	A= -	A=07 8=	.14 P=	==	
NET RADIATION		37.	37.72 MW/	/CM2	••		34.4	40 MW/CM	42	••		27	27.21 MW/CM2	CMS	
RICHARDSON NO.		(4M)09 (8M)	1	5(16M)	50 :		- (8H) 10 (8H) -	1128	(16M)	. 95	( M +)	3) 80		3(16M)	94
		139.192M1-3.05	=	SERVED	JBSERVED DATA):		192M1-2.0	3 (085	ERVED	DATA):	(39.1	92M1-3.		(OBSERVED DATA)	DATA
(1/1)*10	( M+) :	125 (8	1	4 (16M)	134:		28 (8M	1138	(16M)	38:	( W + )	23 (8	IN)31		(164)32
USTAR	. (4N	(4M).5719 (8	(8M) .562	1 (16M)	25 (16M).5569:		(4M).5232 (8M).5154 (16M).5102:	11.5154	(H91)	.5102:	( tw)	(4M).5439 (8M).	~		(16M).5289
	3	E.S	TEMP	SIGA	S16E:	2	MS	TEMP	!	SIGE :	Q.	MS	TEMP	SIGA	SIGE
HEIGHT (M)	: ( DEC )	(H/S)		(DEG)	(DEG):(DEG)	(DEG)	(M/S)	(C) (DEG)		(DEG):(DEG)	(DEC)	(M/S)	(C) (DEG)	(DEG)	(DEC)
1.			2.84					3.27		••			3.97		
2.	: 358	. 6.34	2.47	8.6	••	3.	5.85	2.93	11.4	••	5.	60.9	3.69		
4.	: 349.	7.21	1.97	8.7	••	354.	15.9	2.46	10.3	••	355.	6.85	3.27		
8.	: 357	10.8 .	1.52	8.0	5.0:	-	7.20	5.04	10.0	5.5:	3.	7.62	2.85	11.2	5.
16.	: 344	8.45	1.26		5.0:		7.66	1.84	0.6	5.9:	350.	8.06	2.65		5.
32.	: 344	. 8.94	.92		5.7:		8.14	1.49	9.3	6.1:	350.	8.57	2.30		5.9:
48.	1357	60.6	-64		4.4.		B 20	1.25	0	.0.4	•	8.70	2.03		7

LEAST SQUARES FITTED DATA	RES	FITTED !	DATA													
		SM	TEMP		SIGE		K.S.	TEMP	SIGA	SIGE		MS	TEMP	SIGA	SIGE	!
HEIGHT (M)	••	(M/S)	(3)	(DEG)	(DEG)	••	(M/S)	(3)	(DEC)	(DEG)	••	(N/S)	(0)	(DEC)	(DEG)	••
1.0	"	6.11	2.49	4.6	3.5		5.57	2.95	11.5	4.3		5.83	3.70	12.6	3.9	
2.0	••	69.9		1.6	3.9	••	10.9	2.86	11.0	4.6	••	6.29	3.61	12.0	4.3	••
4.0	••	7.12	2.20	8.9	4.3	••	6.48	2.68	10.5	5.0	••	6.80	3.45	11.5	4.7	••
8.0	••	7.69	1.85	8.6	4.8	••	66.9	2.36	1001	5.4	••	7.34	3.15	10.9	5.5	••
16.0	••	8.30	1.28	8.4	5.3	••	7.54	1.83	9.6	5.9	••	7.93	59.2	10.4	5.1	••
32.0	••	8.96	99.	8.1	6.5	••	8.13	1.27	9.5	4.9	••	8.56	5.09	6.6	6.3	••
48.0	••	9.37	.74	8.0	6.3		8.50	1.34	0.6	1.9	••	8.96	2.11	4.1	6.7	••
		20/00:	DTH/02	BU*100	1 %		20/00	DTH/D2	BU*100	R.I.		20/00	DTH/OZ	80*100	18	! "
4.0		.1822		090	04		.1639	0731	099	05		-1747	0678	083	04	! "
8.0	••	- 9860-	6990	258	12	••	. 0884	0605	282	+1	••	. 0943	0565	238	-111	••
16.0	••	. 1850.		525	50	••	. 0477	0355	569	56	••	. 6050.	0339	064	94	••
39.5*	••	. 0004		508	64	••	* 600*	0050	407	36	••	. 1800.	6900*-	505	43	••

CLD (TENTHS) CLD HT (M) EXPONENTS		0	WEATHER			DAIE	11170187	LAE LOS	00:00:01	DAIE	28/02/11	I ME II	00:00:11
D (TENTHS) D HT (M) PONENTS		0			•		VEATHER		•		F		
D (TENTHS) D HT (M) PONENTS		0	TEMP DEG		•		TEMP DEG	7.3			TEMP DEG		
D (TENTHS) D HT (M) PONENTS T RADIATIO	• ••	0		2 2 2	•	DEW DO	TINT DEG	-1-			OINT DEG	0.81	
D HT (M) PONENTS		0	VISIBILITY (MI)	85	•	. 5	ILITY (MI)	09		VISIB	-	09	
PONENTS			O MID 2	8 1	TOTL 10:	0	10 2	1 8 1	OTL 10:	LOW		HI 7	TOTL 1
PONENTS T RADIATIO	••	LOW	MID	H 09	: 5609	LOW	MID	3	: 5609	LOW	MID	3660 HI	6095
T PADIATIO	••	A=14	8=05	5 P= .18	••	A=20		P= .13			5 8= .24	1 - a	
11.11.11.11.1			10.12	MW/CM2			19	MW/CM2			-	MW/CM2	
RICHARDSON NO		- (M4)	_	0		_ :	.03 (8M)	09(16M)	61	•	8 E	59(16M)	1-1-18
	•			924	5,	-		UBSE	٥,	-	E	× .	
USTAR	• ••	(4M)-3	3128 (8M).	.3137 (16M	M).3150:	(4M) .57	722 (8M).	5607 (1	6M) . 5576:	(4N).3	86 (8M	3489 (1)	16M).3471
		Q.	!	TEMP SIGA	! ~	Q.	S T	P S16	SIGE :	•	WS TE	NP SI	
HEIGHT (M)		:( DEC)	(M/S) (C)	() (DEC)	(DEG):	(DEC) (	(M/S) (C	() (DEG)	(DEG):	(DEG)	(M/S) (C	(DEG)	(DEC)
1.				1.71			5	.14			9	.19	
2.	••	152.	3.56	3		168.	42	.98 8.				68	6
.,	••	141.	90.			158.	7.45 4	•		167.		15	0
.8	••	144.	-	1.33 7.5	5	160.	94		: 4.4:		4.60 5	5.15 7.	*
.91	••	138.	_	61.		153.		20 5.	4			16	.2 6.3
32.	••	140.	5.82 1	01.	4.6:	152.	94			164.			
48.	"	149.	-	-02	4 4.6:	158.	06	62 4.	*	171.	2.	.47 6.	
LEAST SQUARES	RES	FITTED	DATA										
	••	M.S.	-	SI	SIGE :	SM	1		\$16E :	SH	TE		SIGE
HEIGHT (M)	••	(M/S	(3)	(DEG)	: (930)	(N/S)	(3)	( DEG)	(DEG)	S/W)	(3)	( DEG )	(DEC)
1.0	••	3.15	5 1.63	7.6	5.6 :	6.12		4.6	. 0.4	3.56		10.2	3.2
2.0	••	3.57		8.8	5.4 :	6.71		8.2	4.1 :	3.8		9.2	3.8
4.0	••	40.4		8.0	5.2 :	7.36		7.1	+.1	4.13	5.6	8.3	4.5
8.0	••	4.57	1 1.41	7.3	5.0 :	8.07	1 4.58	6.2	4.2 :	4.4	4 5.42	7.5	5.4
16.0	••	5.1			. 8.4	8.85		5.4	4.2 :	4.78	4.9	6.7	4.9
32.0	••	5.86		0.9	. 1.4	9.71		4.7	4.3	5.14	4.4	6.1	7.6
48.0	•	6.30		2.1	4.5 :	10.24		4.3	4.3	5.3	4.55	2.1	8.4
		20 /NO	DTH/D2	80*100	. I.A	20/00	DTH/D2	80*100	RI :	Z0/N0	01H/02	BU*100	12
4.0	••	1191.	0210	073	03 :	.2266	i	050	03	.1009	·	861	02
8.0	••	.0945	0162	177	- 90 -	.1243		139	•	.0543	7	565	29
16.0	•• •	.0535	1900-	•	. 80	.0681	·	288	: 61	.0292	i	-1.125	-1.18
39.2*	••	16600					-			-			

CBSERVED DATA	TA														
CLD (TENTHS) : DATE 28/02/77  : DATE 28/02/77  : TEMP DEG  : DEW POINT DEG  : VISIBILITY (M  CLD HT (M) : LOW O MID 2  CLD HT (M) : LOW MID 2  EXPONENTS : A=21 B= .0  NET RADIATION : A=21 B= .0  NET RADIATION : (4M)08 (8M)  (1/L)*10 : (4M)24 (5M)  USTAR : (4M).5297 (8M)	LOW VIEW C 4 M M M M M M M M M M M M M M M M M M	DATE 28/02/77 TIME 12:00:00 : DATE 28/02/77 TIME 13:00:00 : DATE 28/02/77 TIME 14:00:00 : MEATHER HEATHER HEAT	F COUTEM FISION	46 12:00 63 8 TO 60 HI 60 HI 60 HI 60 HI 60 HI 61 GM 62 HI 63 (16M)	TIME 12:00:00 : DATE 28/02/77 TIME 13:00:00 : DATE 28/02/77 TIME 14:00:00 :  ER	DATE OFF VISI OFF (4M) (4M) (4M)	DATE 28/02/77 TIME 13:00:00  HEATHER  DEW POINT DEG C -8.9  VISIBILITY (MI) 60  CLOW O MID 2 HI 8 TOTL 10  LOW MID 2 HI 8 TOTL 10  LOW MID 2 HI 8 TOTL 10  LOW MID 2 HI 8 TOTL 10  CLOW O MID 2 HI 8 TOTL 10  CLOW O MID 2	1 TIME 16 C 16 C 16 C 17 HI 2 HI 2 HI 3 2440 3 2440 3 2440 4 1 122 4 1 122 4 1 123 4 1 123	9.5 -8.9 B TOTL 10:LOW O HI 6095 : LOW CM2 . LOW A= CM2 . LOW CM3	.00 :: 0095 :: 0095 :: 00474):	DATE DATE COW VISI LOW A= (4M) (4M)	DATE 28/02/77 TIME 14:00:00 :  WEATHER  TEMP DEG C 10.0  DEW POINT DEG C -10.0  VISIBILITY (MI) 60  CLOW 0 MID 3 HI 7 TOTL 10:  LOW MID 2440 HI 6095 :  A = -17 B = .13 P = .12  A = -17 B = .13 P = .12  (4M) -10 (8M)27(16M)55 :  (4M) -28 (8M)37 (16M)37:  (4M) -28 (8M) -37 (16M)37:	7 TIME HER EGC - (MI) 6 3 HI 0 2440 0 2440 0 2440 0 2440 0 2440 0 2440 0 36 MW/C	10.0 -10.0 60 7 TOT 7 TOT 8 TO	:00 : 10 : 10 : 10 : 10 : 10 : 10 : 10 :
HEIGHT (M)	: WD	MS (8/8)	CO CO	S IGA (DEG)	SIGE : WD (DEG)	FDEG)	(3/8)	WS TEMP SIGA (M/S) (C) (DE3)		SIGE: WD (DEG):(DEG)	MD (DEG)	MS (M/S)		TEMP SIGA SIGE : (C) (DEG) :	S1GE :
1. 2. 4. 8. 32.	161. 151. 155. 148.	5.84 6.73 7.43 8.40 8.40	8.00 8.00 7.56 7.31 6.91	08 L L N 4	154. 4.9: 157. 4.8: 149. 4.5: 148.	164. 154. 157. 149.	5.84 7.56 8.12 8.64	8.91 8.75 8.66 7.97 7.63	20.000	446	163. 153. 4.2: 156. 4.1: 148. 3.3: 146.	6.4 6.60 6.14 7.30 7.30	9.74 9.30 9.30 8.92 8.88	12.1 10.9 9.8 8.5 7.5	6.3:

S	LEAST SQUARES FITTED CATA	ATA													
S.M.		TEMP	SIGA	SIGE		SA	TEMP		SIGE		MS	TEMP	SIGA	SIGE	
(M)	5	(3)	-	(DEG)		(M/S)	3	( DEG )	(DEG)	••	(N/S)	3	(DEG)	(DEG)	
5.	63	8.45	11.6	4.7		5.55	8.74	10.0	4.7		3.84		13.8	4.6	! "
.9	10	8.36	0.01	4.7	••	4.07	8.68	8.8	4.5	••	4.17		12.2	2.0	••
.9	19	8.18	8.7	4.8	••	49.9	8.56	7.7	4.4	••	4.53		10.9	5.5	••
7.	116	7.85	7.5	4.8	••	7.26	8.33	6.7	4.2	••	4.92	61.6	9.6	9.0	••
7.	7.76	7.31	4.9	4.8	••	7.93	7.95	5.9	4.1	••	5.34		8.5	9.9	••
8	14	6.70	9.6	6.4	••	8.68	7.49	5.1	3.9	••	5.79		7.6	7.2	••
œ	.82	6.71	5.1	6.4	••	9.14	7.42	4.7	3.8	••	6.08		7.1	1.6	••
20/00	70	DTH/02	80*100	R I		Za/na	DTH/D2	80*100	Z.		20/00	01H/02	BU*100	1 %	! "
.17	- 2771.	0741	095	+00-		'	.0482	061	04		.1240	0424	115	05	!
.09	- 29	.0620	270	12	••	-1083 -	0405	172	00		.0673	0353	324	+11-	••
.05	- 12	.0378	561	64		'	.0251	356	25	••	.0365	0213	656	55	••
00.	. 51	.0075	564	30	••	,	6900 .	483	63	••	6900.	0050	794	96	••
	1			-						!					!

```
: DATE 28/02/77 TIME 15:00:00 :
                     WEATHER
                   TEMP DEG C
                              10.0
             : DEW POINT DEG C
                             -10.0
            : VISIBILITY (MI) 60
            :LOW O MID 3 HI 7 TOTL 10:
CLD (TENTHS)
           : LOW MID 2440 HI 6095 :
CLD HT (M)
           : A= -.17 B= .01 P= .12
EXPONENTS
NET RADIATION : 7.60 MW/CM2
RICHARDSON NO.: (4M) -.04 (8M) -.12(16M) -.24 :
            : (39.192M) -.41 (DBSERVED DATA):
            : (4M) -.13 (8M) -.17 (16M) -.170
  (1/L)*10
            : (4M).4001 (8M).3901 (16M).3848:
  USTAR
             : WD WS TEMP SIGA SIGE :
 HEIGHT (M) :(DEG) (M/S) (C) (DEG) (DEG):
                           9.84
      1.
         : 154. 4.49
: 143. 5.21
: 147. 5.85
                           9.77 8.9
      2.
                          9.53 7.7
9.22 6.5
      4.
      8.
                                       4.4:
                   6.13
            : 139.
                           9.30 5.9
                                      4.5:
     16.
            : 139.
                    6.41 9.05 5.4
     32 .
            : 146. 6.74 3.81
                                  5.2 4.4:
 LEAST SQUARES FITTED DATA
 : WS TEMP SIGA SIGE: HEIGHT (M) : (M/S) (C) (DEG) (DEG):
     1.0 : 4.33 9.71 9.7 4.3 : 2.0 : 4.71 9.68 8.6 4.3 :
                      9.61 7.7
     4.0
           : 5.11
                                     4.4 :
            : 5.55
                      9.47
                             6.8
                                     4.4 :
     8.0
            : 6.03
                      9.25 6.1
                                     4.5 :
    16.0
         : 6.55 8.95 5.4
: 6.87 8.85 5.0
                                     4.5 :
    32.0
                                    4.5 :
    48.0
            : DU/DZ DTH/DZ BU*100 PI :
     4.0 : .1407 -.0240 -.051 -.02 :
     8.0 : .0764 -.0200 -.144 -.06 :
           : .0415 -.0119 -.292 -.24 :
    16.0
    39.2* : .0206 -.0050 -.620 -.82 :
```

		20 50 5				. 8	.3	0
ب		.2	SIG		*	- m	3	2
1.0	161	6M) VED 16M	GA GA	7.4	9.9	4.9	3.9	3.8
8.80	# 09 H	06(1 06(1 8SER 14 (	SI					
U I I	36	32.	C)	9.4	0.0	10.2	10.1	0.0
o bec	MID	8 . 8 8 . 8 . 8 . 8 . 8 . 8 . 8 . 8 . 8						
ILIT MID	2 8=	.02 2M) .08	WS (M/S	4.4	5.1	6.5	7.5	8.2
SIS	2	19			:.			-
LOW VE	4 P		LDEG	155				
6		10 10 10 10 10 10 10 10	SE :			0	3.8:	6.7
17.		DA.	SIG					
	H 4.	164) (164) (167)	13 A E3 )	9.6	8.2		6.6	4
85	0 = 0	01( 01( 08) 01 785		23	25	18	00	11
SIE 6	10		TEM CC	00	10	0	10	0
T 06	E I	8 8 8	53	99	46	65	20	20
BILI	10 8	924)	3 2	4	5.	9	7.	1
VISI	. ·	4M)	(5)	15.	34.	32.	33.	
	آھ 		: (0					
		.10 ATA)	IGE DEG)		,	4.5	3.8	2
OTL		-0 E E		9	e 4	0	9	·
	Ŧ · ;	ERV 1616	SIG DEG	80	~	0	4	7
-	ח ח		1	44.	.27	.02	.76	2
EG TO	10		10					
TIO	B = 3	2 - 9 - 5	WS /S)	.04	.85	.21	.68	BO
181	.22	1924	2	4	<b>u</b> , 4	, -		a
VIS	1 II	(44) (44)	MD DEG)	156.	145.	142.	141.	148
=			=					•
HS)	- 1	01	£					
IN	NTS	101 ×	TH:	-1.	40	16.	32.	48
-	HOONE	HAP UST	HE 16					
	: DEW POINT DEG C -8.9 : DEW POINT DEG C -8.1 : DEW POINT DEG C -8.1 : VISIBILITY (MI) 85 : LOW O MID 10 HI TOTL 10:LOW O MID 9 HI O TOTL 9:LOW O MID 8 HI O TOTL	: DEW POINT DEG C -8.9 : DEW POINT DEG C -8.1 : DEW POINT DEG C -8.1 : VISIBILITY (MI) 85 : VISIBILITY (MI) 85 : VISIBILITY (MI) 85 : LOW O MID 10 HI TOTL 10:LOW O MID 9 HI O TOTL 9:LOW O MID 8 HI O TOTL 10:LOW O MID 8 HI O TOTL 9:LOW O MID 3660 HI : LOW MID 4570 HI : LOW MID 4570 HI : LOW MID 3660 HI : A=22 B=12 P=19	: DEW POINT DEG C -8.9 : DEW POINT DEG C -8.1 : DEW POINT DEG C -8.1 : VISIBILITY (MI) 85 : VISIBILITY (MI) 85 : VISIBILITY (MI) 85 : VISIBILITY (MI) 85 : VISIBILITY (MI) 85 : LOW O MID 10 HI TOTL 10:LOW O MID 9 HI O TOTL 9:LOW O MID 8 HI O TOTL : LOW MID 4570 HI : LOW MID 4570 HI : LOW MID 3660 HI : A=22 B=12 P= .19 : A=22 B=12 P= .14 : A=10 B= .01 P= .14 : A=22 B=20 P= .19 : A=22 B=22 B=20 P= .19 : A=22 B=22 B=20 P= .19 : A=20 P= .20 : A=20 P	: DEW POINT DEG C -8.9 : DEW POINT DEG C -8.1 : DEW POINT DEG C -8.1 : VISIBILITY (MI) 85 : VISIBILITY (MI) 85 : VISIBILITY (MI) 85 : VISIBILITY (MI) 85 : VISIBILITY (MI) 85 : US MILL	: DEW POINT DEG C -8.9 : DEW POINT DEG C -8.1 : DEW POINT DEG C -8.1 : VISIBILITY (MI) 85 : V	: DEW POINT DEG C -8.9 : DEW POINT DEG C -8.1 : DEW POINT DEG C -8.1 : VISIBILITY (MI) 85 : VISIBILITY (MI) 86 : VISIBILITY (MI) 85 : VISIBILITY (MI) 86 : VISIBILITY (MI) 85 : VISIBILITY (MI) 86 : V	Sew Point Deg C	Sew Point Deg C -8.9   Sew Point Deg C -8.1   Sew Point Deg C -8.1

	••	SM			SIGE	••	NS	TEMP	SIGA	SIGE	••	NS	TEMP	SIGA	SIGE
HEIGHT (M)		(M/S)	(3)	(DEG)	(DEG)		(M/S)	3	( DEC)	(DEG)		(M/S)	(3)	(DEG)	(DEG)
1.0		4.73		10.1	6.0		4.41	10.23	9.5	3.9		3.88	9.83	8.9	6.4
2.0	••	5.23		8.7	5.5	••	4.86	10.23	8.9	3.9	••	4.43	98.6	7.6	5.6
6.0	••	5.78	10.28	7.5	5.1	••	5.37	10.22	8.3	3.9	••	5.06	16.6	6.5	4.9
8.0	••	6.38		4.9	4.7	••	5.92	10.19	7.7	4.0	••	5.79	10.00	5.6	4.3
16.0	••	7.05		5.5	4.3	••	6.53	10.13	7.2	4.0	••	19.9	10.13	4.8	3.7
32.0	••	1.79		4.7	4.0	••	7.21	86.6	6.7	4.0	••	7.56	10.20	4.1	3.2
48.0	••	8.26		4.3	3.8	••	7.63	9.18	4.9	4.0	••	8.18	10.02	3.7	3.0
		Za/na	DTH/D2	80*100	2		20/00	DTH/DZ	80*100	R.		Za/na	DTH/DZ	8U*100	2
4.0		1261.	0185	031	02		.1762	.0037	.007	00.		.2262	.0335	.072	00.
8.0	••	1901.	0157	085	05	••	.0972	.0028	810.	00.	••	.1293	.0284	.188	00.
16.0	••	.0586	1010	180	10	••	.0536	1100.	.023	00.	••	.0739	.0184	.372	00.
39.2*	••	.0250	0056	485	62	••	6110.	+ *00	438	54	••	.0437	0000	000	00

<	1
٠	
<	
C	1
C	٠
u	ų
3	١
0	ı
u	
U	1
9	
-	5

		MEATHER	HER	8		,	WEATHER	a	יושר לסייסי		7	WEATHER	0	00.00.17 341	
		TEMP DEG	EG C	8.3	••		TEMP DEG	ပ	4.9			TEMP DEG	) EG C	4.6	•
	DEM	0	DEG C	-8.4	••	DEW	POINT DE	u .	-6.3	•	DEW	DEW POINT	)EG C	-11.2	•
	NIS	VISIBILITY	CIW	09	••	VISI	BILITY	CIM)	2	•	VISI	BILITY	CIM	52	
	10 n	0 10	1H 9	O TOTL	TL 6:	LOW	M O MID 3	-	1 TOTL	: 4:	LOW	O MID	2 HI	I TOTL	1 3:
CLD HT (M)	107	MID	0 4570	1H 0	••	LOW	MID	0 4570	Ŧ	7620 :	LOW	2	MID 4570 HI		7620 :
	- = V	A=50 B=65	.65 P=	39	••	A= -	A=17 B=	.22 P=	.29	•	A=	.50 8=	74 P=	.34	•
LION		-6-	-9.07 MW/	/CM2	•		0	.76 MW/CM2	.M2			-10.	.53 MW/	CM2	•
RICHARDSON NO.	( M+)	.06 (8M)	I. (H	12(16M)	. 20 :	(44)	.05 (8M)		(H91)	. 21	(M4)	.03 (8M	_	7(16M)	: 41.
	139.	139.192M1 .	.12 (08	BSERVED	DATA!		(39.192M) .		COBSERVED	DATA):	(39.192M)	92M1	14 (08	OBSERVED	DATA):
11/11*10	( 4M)	.30 (8	4. (MB)	14 (16M	1 .48:	( 4M)	.19 (8		(16M)	. 55:	M4)	.10 (8		( H91 ) 9	.26:
	(H4)	14M) . 2164 (8	(8M).220	N91) 10	-	( 4M)	.2765 (8M)	M).2615	.2615 (16M)	.2432:	M 4	.3203 (8M)	.33	( 16M)	.3217
	9	S.	TEMP			Q¥		TEMP		SIGE :	2	SM	TEMP		SIGE :
HEIGHT (M)	:( 066)	(M/S)	3	(DEG)	(DEG):(DEG)	(DEC)	(M/S)	(C) (DE3)		(DEG):(DEG)	(DEC)	(M/S)	3	(DEC)	(DEG):
			5.41					4.68					4.91		
	135.	2.63	5.80	7.6	•	132.	3.47	5.00	8.0	•	166.	3.78		7.2	•
•	125.	3.39	6.25	1.9	••	122.	4.31	5.33	9.9	•	155.	49.4		6.1	•
	130.	4.41	19.9	4.8	2.9:		5.17	5.47	5.6	3.6:		5.15		4.6	3.9:
	125.	66.5	7.88	3.1	1.9:		6.28	61.9	6.4	3.0:		7.16		3.3	2.9:
	127.	7.74	8.74	6.1	1.0:	126.	7.85	6.93	4.5	2.3:	150.	04.6	7.51	2.2	1.73
	137.	8.90	8.87	1.1	1.0:		8.80	7.17	6.4	2.6:		11.30		1.4	1.0:

_	
DATA	
-	
-	
-	
u	
FITTED	
-	
-	
••	
4	
.,	
•	
u	
COLLARFA	
-	
=	
C	
"	
•	
-	
٠.	
v	
FACT	
14	

:	-				(M/S) (C) (	(DEG): (M/S) (C) (	(DEG) (DEG) : (M/S) (C) (	WS TEMP SIGA SIGE: WS TEMP SIGN (M/S) (C) (DEG) (DEG) : (M/S) (C) (DEG)
4.8			4.85	4.85	: 2.84 4.85	11.1 : 2.84 4.85	11.8 11.1 : 2.84 4.85	5.58 11.8 11.1 : 2.84 4.85
7.5		4.95			3.48	7.1 : 3.48	8.4 7.1 : 3.48	5.75 8.4 7.1 : 3.48
9.9		51.5			: 4.25	1 4.5 : 4.25	6.0 4.5 : 4.25	6.09 6.0 4.5 : 4.25
5.9		5.53			: 5.21	2.9 : 5.21	4.2 2.9 : 5.21	6.71 4.2 2.9 : 5.21
5.3		6.17			: 6.37	1.8 : 6.37	3.0 1.8 : 6.37	7.73 3.0 1.8 : 6.37
4.7		16.9	7.79 6.97			: 7.79	1.2 : 7.79	2.1 1.2 : 7.79
4.4		7.15			. 8.77	11.8 : 6.	1.7 : 6. 7.1	8.83 1.7 .9 : 8.83
80*100		DTH/DZ	DU/DZ DTH/DZ			9U*100 RI : DU/DZ	0 RI : DU/DZ	9U*100 RI : DU/DZ
.332		.1065	_	_	2881 .	.00 : .2881	.816 .00 : .2881	.1700 .816 .00 : .2881 .
. 784		***	•	•	: .1763 .	. 00 : .1763 .	1.638 .00 : .1763 .	. 1467 1.638 .00 : .1763 .
1.551		1020.	1070. 8701.	•	•	. 1078	. 9701. : 00.	2.597 .00 : .1078 .
1.960		.0250			. 4650. :	. 4650. : 00.	. 4650. : 00. 814.1	. 4650. : 00. 814.1 1810.

\* CRSERVED DATA

	 DATE 28	28/02/77 WEATHER	I ME	22:00:33	00:	<b>ĕ</b> 	ATE 28/	WEATHE	= ~ .	ME 23:0	23:00:00		DATE 01		00	0 4	00:0
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (1/L)*13 USTAR	 DEW POIN "LOW 0 MILI "LOW 0 MILI "LOW 0 MILI "A=05 B " (4M) .34 " (4M) 5.21 " (4M) 5.21 " (4M) 5.21	M DEG TY (M MID MID MID 88.30 (8M) (8M)	- 4. 4 5 4 0 4 11	2.1 2.1 41 16M) 2 VED (16M)	L 3 1.44 DATA) 20.26	PLO		2 × 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	C (MI) 2 O HI O O O O	-13. 25. 41. HI 6(16 6(16	55 4 6095 4 M)11.81 ED DATA) 6M).0039		DEW POIL VISTBIL VISTBIL LOW 1220 A=74 (4M) .1 (39.192M (4M) .9 (4M) .9	MI B	00-1 01-1	1 10 HI 6 HI	.35 .35 .041)
HEIGHT (M)	 : WD	WS TE	TEMP S	16A EG)	SIGE (DEG)	9	WD EG) (*	WS W/S)	TEMP (C)	SISA (DES)	SIGE (DEG	=	MD DEG)	WS (M/S)	TEMP (C)	\$16A (DEG)	SIGE (DEG)
1. 2. 4. 8. 32. 48.	 79. 74. 88. 106. 124.	11.34	2.93 3.60 4.00 4.11 4.41 5.01	13.5 13.8 16.0 14.8 13.3	4.8		102. 1 91. 1 104. 1 109. 1 125. 2 162. 2	1.49 1.78 1.99 1.99 2.19	3.71 4.37 5.13 5.69 6.52 7.09	25.0 21.3 21.7 21.7 34.1 33.8	11.2	!	352. 347. 357. 345. 344.	1.36 1.93 2.79 4.40 5.88		22.5 15.5 8.3 2.7 2.8 2.9	3.6 2.1 1.9
LEAST SQUARES HEIGHT (M)	FITTED DATA WS (M/S)	DATA TEMP		SIGA S	S 1 G E		WS (M/S)	120	EMP C)	SIGA DEG)	SIGE (DEG)		WS (M/S		EMP (C)	SIGA DEG1	SIGE (DEG)
0.00	 1.06	3.66		m & m &	10.7		1.54	4446	21 1 40 2 76 2	3.9	6.5		1.41	111	73 3 53 2 115 1		87.8
16.0 32.0 48.0	 2.01 2.48 2.81 00/02	16	12.9		88.5		2.27 2.41 2.41	6.44 7.43 6.96 0TH/02		29.4 32.6 34.7 8U*100	20.1 23.0		3.8 5.4 6.6	3. 3.	258	2.8 2.1 2.1	2.6
4.0 8.0 16.0 39.2*	 .0936 .0578 .0357		12011				.0550 .0303 .0167	.1788 .1506 .0940	1 -	489 657 800 316	8888			119	115	813 013 368 990	

A-44

-
4
-
4
_
0.00
-
-
u
>
$\alpha$
ш
FF
ď

10TL 10:	\$166 :: (DEG): 4.8: 4.2: 3.4:
E HI 97	SIGA (DEG) 7.2 5.9 5.9
MEATHER HP DEG C NT DEG C ITY (MI) IID 10 HI MID 305 BE - 24 P= -1.81 MW/ -1.81 MW/ -06 (OB) 2 (8M) .06	(C) (C) 31 21 21 23 23
: DATE 01/03/77 TIME 03:0  : TEMP DEG C 1.1  : DEW POINT DEG C -6.7  : VISIBILITY (MI) 20  :LOW MID 10 HI TO  : LOW MID 3050 HI  : A=17 B=24 P= .17  -1.81 MM/CM2  : (4M) .01 (8M) .02(16M)  : (59.192M)06 (08SERVED)  : (4M) .02 (8M) .04 (16M)  : (4M) .429 (8M) .4232 (16M)	6.10 6.10 6.81 7.68 8.61 9.06
DEW VISI LOW A = (4M) (4M)	357. 357. 354. 354. 354.
1:00   L   L   L   L   L   L   L   L   L   L	SIGE: WD (DEG):(DEG): : 357. : 347. 34: 341. 34: 341. 34: 343.
TIME 02:00:00  C	(C) (DES) -35 -21 7.7 -10 6.8 -08 6.7 -10 7.7 -10 7.7
THER CEG C (MI) 305 PE CO PE C	(C) (C) (C) (C) (C) (C) (C) (C) (C) (C)
ME 01:00:00 : DATE 01/03/77 TIME 02:00:00 :  2.8 : TEMP DEG C	2.21 2.21 2.78 3.08 3.69 4.41 5.66
DATE DEW VIST LOW LOW A= .	40 (DEG) 327. 317. 323. 311. 310.
00:00 TL 8 6095 DATA1 11.2.88	SIGE: WD (DEG):(DEG) : 327. : 317. 6.9: 323. 7.4: 310. 5.4: 310.
2.8 -13.6 20 2 TOTL 50 HI 6095 -38 -15(16M) .5	S1GA (DEG) 11.6 12.9 12.4 13.1 8.8
11. CO # 4 30 11.	(C) (C) 00 17 27 29 . 29 . 65 . 65
DATE 01/03/77 TIN WEATHER  TEMP DEG C  VISIBILITY (MI)  LOW MID 6 HI  LOW MID 6 HI  LOW MID 305  A=17 B=44 P=  -2.86 MW/  (4M) .05 (8M) .1  (4M) .22 (8M) .6  (4M) .1145 (8M) .106	7 X X X X X X X X X X X X X X X X X X X
DATE 01/0  TEM TEM VISIBILI LOW NI LOW A=17 B (4M) .05 (4M) .05 (4M) .22 (4M) .1145	40 (0EG) 328 318 325 304 288 293
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO. USTAR	HEIGHT (M)  1. 2. 4. 8. 16. 32. 48.

LEAST SQUARES FITTED DATA

A SIGE :		2.5
P SIG		6.3
TEN		25
WS (M/S)	5.38	6.9
•• ••		
SIGE (DEG)	4.6	9.0
SIGA (DEG)	1.7	7.2
TENP (C)	26	-117
WS (M/S)	1.82	2.65
•• ••		
\$ 1GE (DEG)	20.7	11.2
SIGA (DEG)		12.4
TEMP (C)	.12	.18
WS (W/S)	1.04	1.76
HEIGHT (M)	1.0	4 8

\* OBSERVED DATA

4
AT
0
0
VE
E R
S
08
-

_	10.	5.2: 4.8: 4.3:
0:0	T AO	010
E 06:00:00 -1.8 -3.1	1) 10	SIGA (DEG) 7.2 6.6 6.0 5.1 4.4
7 TIME HER S- EG C - EG C -		CC
DATE 01/03/77 WEATHER TEMP DEG DEW POINT DEG	10 MID H1 915 MID •18 B=15 P= 1.46 MW/( (8M) (8M) (8M)	M.S. (M.S.) 4.16 4.68 5.15 5.15 5.65 7.24 7.24
DATE OF P	LOW 10 MIC LOW 915 A=18 B= (4M) (4M) (4M)	00 00 350. 357. 344. 357.
	TUTL 10: HI: -15: 26: 16M) -02: RVED DATA): (16M) -01:	SIGE: WD (DEG): (DEG) : 350. 4.4: 357. 3.6: 344. 3.7: 344.
S- C -0.6 C -2.1	HI TOTL 10: HI HI MVCM2 001(16M) 002: 01(16M) 01: 01 (16M) 01: 4393 (16M) 4289:	513A (DE3) 6.6 5.8 5.2 4.1
α <b>-</b>	HI -15 P= . 2-16 MW/CM2 (8M) .01(1) (8M) .01(1) (8M) .01(1) (8M) .01(1)	TEMP (C)
DATE 01/03/77 T WEATHER TEMP DEG C DEW POINT DEG C	10 MID 915 MID -17 8= -1 2.16 .00 (8M) .91 (8M)	M.S. (M/S) 5.38 6.08 6.88 7.65 8.25 8.25
DATE O	LDW 10 MID LDW 915 M A=17 B= (4M) .00 ( (39.192M) - (4M) .01 ( (4M) .4576 (	
 0	1 TOTL 10:LDW 050 HI : LOW	SIGE: WD (DEG):(DEG) : 357. : 348. 4.5: 355. 3.6: 342. 3.6: 342. 3.2: 344. 2.9: 358.
NE 04:00:00 S- 1.1 -5.0	TOTL 10:1 50 HI (CM2 00(16M)01: BSERVED DATA): 00 (16M)01: (55 (16M).5405:	516A DEG1 6.9 5.2 4.3 3.3
F ~ 0 0 5	10 H1 24 P= 1.46 MW/CM (8M)00( (8M)00 (8M) -5455	(C)
DATE 01/03/77 T WEATHER TEMP DEG C DEW POINT DEG C	MID 8 B= 2M1 .00 .00 .00 .00	MS) (M/S) (M/S) 6.54 7.47 8.53 9.35 10.69
DEW P	.LOW MID 10 HI .LOW MID 30 .A=28 B=24 P . (4M) .00 (8W) . (4M) .00 (8W) . (4M) .00 (8W)	6. 356. 349. 349.
	zċ	
	CLD (TENTHS) :LOW CLD HT (M) : LOW EXPONENTS : A=2 NET RADIATION : (4M) RICHARDSON NO.: (4M) (17L)*10 : (4M) USTAR : (4M).5	HEIGHT (M) : (DEG)  1. 2 6. 4. 356. 8. 44. 16. 349. 32. 351.

LEAST SQUARES FITTED DATA

		(N/S)	TEMP (C)	SIGA (DEG)	\$16E (DEG)		(W/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		(N/S)	TENP (C)	SIGA (DEG)	SIGE (DEG)
1.0		6.01	-1.45	8.7	7.3		4.93	-2.57	7.4	5.8		3.66		8.3	7.2
2.0		69.9	-1.46	7.2	6.2		5.48	-2.57	9.9	5.2	••	4.12		7.4	6.9
4.0	••	7.45	-1.48	5.9	5.5	••	6.08	-2.58	5.8	4.7	••	4.65		6.5	5.8
8.0	••	8.29	-1.52	4.9	4.4	••	6.75	-2.60	5.2	4.3	••	5.24		5.8	5.2
16.0	••	9.24	-1.60	4.0	3.7		7.49	-2.66	4.6	3.9	••	16.5		5.1	4.7
32.0	••	10.28	-1.79	3.3	3.2	••	8.31	-2.80	4.1	3.5	••	99.9		4.5	4.2
48.0	••	10.95	-2.01	3.0	5.9		8.84	-2.98	3.9	3.3	••	7.14		4.2	4.0
		70/00	DTH/D2	80*100	RI		20/00	DTH/D2	80*100	ı,		20/00	0TH/02	BU*100	1 2
4.0		.2673	+000.	0000	00.		.2119	.0045	-000	00.		.1858			
8.0	••	.1488	0002	100	00	••	.1176	.0037	.019	00.	••	.0590			
16.0	••	.0829	+100	015	00	••	.0653	6100.	.032	00.	••	1047			
39.5*	••	.0231	0044	221	30		.0281	1:000	244	+11	••	.0369			

•	9	
	-	
	q	
(		
	_	
(	2	
١	1	
	>	
	2	
1	,	
	Ü	
•	,	
	1	
	=	

: 00:00	10TL 10 :	MW/CM2 : (16M) : (085ERVED DATA): (16M) : (16M) : (16M) : (16M)	TEMP SIGA SIGE :			3.6:
1E 09:0		(16M) (16M) (16M) (16M)	SIGA (DEG)	6.9	5.5	3.8
HER S	(M1) H1 13 P.	7.25 MW/ (8M) (0B (8M)	(C)			
DATE 01/03/77 TIME 09:00:00  WEATHER S-  TEMP DEG C -2.0  DEW POINT DEG C -4.6	: VISIBILITY (MI) :LOW 10 MID H : LOW 610 MID : A=19 B=13	(4M) (8M) (16 (39.192M) (08SERV (4M) (8M) (1	WS (M/S)	2.98	4.50	5.58
DEN	VISI LOW 10 LOW A=	(4M) (1A): (39.192M) (4M) (4M)	(DEG)	316.		301.
	0	DATA):	SIGE :		4.5:	3.6:
DATE 01/03/77 TIME 08:00:00 WEATHER TEMP DEG C -2.2 DEW POINT DEG C -5.3	5 TOTL 1 HI •21	MW/CM2 (16M) (OBSERVED DATA): (16M)	SISA SIGE: WD (DEG) (DEG):(DEG)	1.1	7.1	5.8
HER EG C	HI 00.	(8M) (8M) (8M) (8M)	(C)			
WEATHER TEMP DEG	: VISIBILITY (MI) 5 10 :LOW 10 MID HI TO : LOW 610 MID HI : A=12 B=09 P= .21	(8) (8) (8)	(M/S)	1.98	2.90	3.67
DATE O	VISIB LOW 10 LOW 61	(4M) (39.19 (4M) (4M)	MD (DEG)	305.	300.	290.
	TOTL 10 :1	DATA):	SIGE :		4.8:	3.7:
ME 07:00:22 S- -2.3 -4.5		7. (16M) : (4M) (8 (16M) : (4M) (8 (16M) : (4M) (8 (16M) : (4M) (8	SIGA SIGE: WD	7.1	5.5	4.0
Foo	(MI) HI D = 4 91.	(8M) (8M) (8M) (8M)	(C)			
ATE 01/03/77 T WEATHER TEMP DEG C	ITY ID MI	4. (8) (8) (8)	WS (M/S)	4.08	5.69	6.31
DATE 01/03/77 WEATHER TEMP DEG	: VISIBIL :LOW 10 M : LOW 610 : A=17	(4M) (39.192M) (4M) (4M)	( DEG)	355.	353.	342.
		NO.				
	CLD (TENTHS) CLD HT (M) EXPONENTS	RICHARDSON NO. (1/L)*10 USTAR	HEIGHT (M)	2.	8.	32.

LEAST SQUARES FITTED DATA

HEIGHT (M)		WS (M/S)	TEMP (C)	SIGA (DEG)	S IGE (DEG)		WS (M/S)	TEMP (C.)	SIGA (DEG)	SIGE (DEG)		WS (M/S)	TENP (C)	SIGA (DEG)	SIGE (DEG)	
1.0		3.68		7.8	8.9		1.87		9.5	5.3		2.82		7.8	5.7	
2.0	••	4.11		7.0	0.9	••	2.17		8.5	2.0	••	3.24		8.9	5.5	••
4.0	••	4.59		6.2	5.4	••	2.51		7.8	4.7	••	3.71		0.9	4.7	••
8.0	••	5.12		5.5	4.8	••	2.90		7.1	4.4	••	4.26		5.3	4.3	••
16.0	••	5.72		4.9	4.3	••	3.35		6.9	4.1	••	4.88		4.6	4.0	••
32.0	••	6.39		4.3	3.9	••	3.87		0.9	3.9	••	5.60		1:+	3.6	••
48.0	•	18.9		4.0	3.6		4.22		5.7	3.7		6.07		3.8	3.4	••
		70/NO	DT H/ DZ	80*100	R I		0 70/00	DTH/D2	80*100	RI		Z0/N0	DTH/02	BU*100	۳ 1	!
4.0		1691.					.1216					.1704				
8.0	••	***					.0703				••	1160.				••
16.0	••	.0527				••	.0407				••	.0560				••
39.2*	••	.0350				••	.0375				••	.0287				••
*	DESE	* CRSERVED DATA	A			1										!

OBSERVED DATA	TA																	
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NG.: (1/L)*10		DATE 01/C  DEW POID  VISIBIL  LOW 10 M  LOW 61(AM)  (4M)  (4M)	DATE 01/03/77 TI WEATHER TEMP DEG C VISIBILITY (MI) DW 10 MID HI LOW 610 MID A=18 B=17 P 9.07 WW (4M) (8M) (4M) (8M)	777 TI DEG C DEG C OFG C Y (MI) HI MID HI 9.07 WM (8M)	S-1. -1. -3. -87 -87 -3. -3. -1. -3. -1. -1. -1. -1. -1. -1. -1. -1. -1. -1	1 1 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10: D	DATE 01/0 DEW POIN VISIBILI LOW 6 41 LOW 610 A=19 B (4M) (4M) (4M)		3/77 TIME 11  3/77 TIME 11  DEG C -1.  T DEG C -1.  TY (MI) 5  14 HI  MID 3050 HI  =09 P= .1  12.69 MW/CM2  (8M) (16  (8M)	TIME 11:00 S -1.0 -1.8 5 -1.8 11 TOT 3050 HI P= .11 WM/CM2 (16M) (16M) (16M) (16M)	:00:00 8 R TOTL 10 I I ED DATA!	DAT DECOW 1 COW 1 CO	DATE 01/03/ WEMPA DEW POINT VISIBILITY OW 6 MID LOW 6 10 M A=03 B= 19 (4M)-1.17 ( (4M)-1.17 ( (4M)-3.11 ( (4M)-3.11 (	DEW POINT DEG C VISIBILITY (MI) W 6 MID 4 H DW 610 MID 3 = -03 B= 10 19.18 M 4M)-1.17 (8M)-5 4M)-196 (8M).6	DATE 01/03/77 TIME 12:00:00  WEATHER  TEMP DEG C -0.1  DEW POINT DEG C -2.3  VISIBILITY (MI) 30  LOW 6 MID 4 HI TOTL 1  LOW 610 MID 3050 HI  A= -0.3 B= .10 P= .08  19.18 MW/CM2  (4M)-1.17 (8M)-5.24(16M)-26.3  (4M)-3.11 (8M)-6.89 (16M)-17.  (4M)-3.11 (8M)-6.89 (16M)-17.	TIME 12:30:00  -0.1  -2.3  ) 30  HI TOTL 1 3050 HI P= .08  MW/CM2 5.24(16M)-26.3 (08 SERVED DATA 6.89 (16M)-256	DATE 01/03/77 TIME 12:00:00  WEATHER  TEMP DEG C -0.1  DEW POINT DEG C -2.3  VISIBILITY (MI) 30  DM 6 MID 4 HI TOTL 10  DM 610 MID 3050 HI  A=03 B= .10 P= .08  19.18 MM/CM2  14M)-1.17 (8M)-5.24(16M)-26.3  (4M)-1.17 (8M)-6.89 (16M)-17.3  (4M)-3.11 (8M)-6.89 (16M)-17.3
HEIGHT (M)		: WD	(M/S)	TEMP (C)	SIGA (DEG)	SIGE: WD (DEG):(DEG)	: (0	WD EG)	WS (W/S)	TEMP (C) (	SISA (DES)	SIGE: WD (DEG):(DEG)	: ( DE		(W/S)	TEMP (C)	TEMP SIGA	SIGE :
1.										-1.72						-1.13		
2.	••	350.	5.29		9.9			4.	3.17	-2.10		3			1.75	-1.21		
**	••	340.	6.03		6.5			354.	3.53						10.2	-1.41		
8.	••	346.	11.9		5.1		::	.:	3.86		5.9				2.17	-1.44		
16.	••	332.	7.41		4.1		3: 3	47.	4.13	-2.80					2.26	-2.01		
32.	••	331.	8.24		4.2		3.9: 346.	46.	4.30		3.9	4.3:		16.	2.28		7.4	7.6:
48.	••	345.	8.73		4.1		5: 3	58.	4.48		3.9				2.26		9.5	
	!						!										-	

	••	SM	TEMP		S 1 GE	••	SH	TEMP	SIGA	SIGE	••	MS	TEMP		SIGE
HEIGHT (M)		(M/S)	(3)	(DEG)	(DEG)		(M/S)	(3)	( DEG )	(DEG)		(M/S)	3	( DEG )	(DEG)
1.0		4.81		7.8	6.9		3.02		8.2	5.8		1.76		8.5	5.0
2.0	••	5.36		6.9	6.2	••	3.25		7.2	5.4	••	1.86		8.3	5.3
4.0	••	5.97		1.9	5.5	••	3.50		6.3	5.1	••	1.96		8.2	5.7
8.0	••	6.65		5.4	6.4	••	3.76		5.5	4.8	••	2.07		8.0	6.1
16.0	••	7.40		4.7	4.4	••	4.05		4.8	4.5	••	2.18	-2.00	7.9	6.9
32.0	••	8.25		4.2	3.9	••	4.36		4.2	4.3	••	2.29		7.7	7.0
48.0	••	8.78		3.9	3.6	••	4.55		3.9	1:,	••	2.37		1.6	7.3
		20/00	DTH/02	90*100	я 1		Za/na	DTH/D2	BU*100	<u>.</u>		70/00	DTH/02	BU*100	~
4.0		.2147					.0851					.0344	0385	578	15
8.0	••	96111.				••	.0458			00.	••	.0182	0479	-2.594	-1.39
16.0	••	9990.				••	.0246			00.	••	9600.	0668-13.045	13.045 -	-24.10
39.5*	••	.0306				••	.0113			00.	••	0013			

-
4
-
C
ū
VEN
9
u
UV
9
-

	-	DATE	: DATE 01/03/77 TI	7 11	ME 13:00:00	:00:	!	DATE	: DATE 01/03/77	MIT T	TIME 14:00:00	!	DAT	: DATE 01/03/77 TIME 15:00:00	3/77	TIME	15:00	: 00:0
	••		WEATHER	HER			••		WEATHER	HER				3	WEATHE	~		
	••		TEMP DEG C	EG C	-	2	••		TENP D	DEG C	==			TEM	P DEG		4.3	••
	••	DEM	DEM POINT DEG	5 0 C	-1-	+	••	DEW	DEW POINT DEG C	DEG C	-1.7		: DE	DEW POINT DEG C	T DEG		-0-1	•
	••	VISI	VISIBILITY (MI)	CHI	01		••	VISI	VISIBILITY (MI)	(MI)	30		: 1	VISIBILITY (MI)	TY CA	11) 3	0	••
CLD (TENTHS)	יוו	70	OIW 9	4 HI		TOTL		MO	3 MID	7 HI	101	11 10	HOTE	Z MI	0	H	3 1	11 7:
CLD HT (M)		*O7 :	610 MID	0 30	150 HI			LOW	610 MI	0 213	2 HI		. LON	019	MID	2135	Ŧ	7620 :
EXPONENTS		A=	A=02 B=	.24 P	.24 P= .07	11	••	A=	: A=11 B= .08 P= .1	-08 P=	.12		: A=	: A=07 B= .11 P=		-d 1	.10	••
NET RADIATION	••			22.46 NW	1/CH2		••		29.	29.72 MW/CH2	CM2				25.74	25.74 MW/CM2	M2	••
RICHARDSON NO.		-(H+)	4M)-3.83 (8M)-7	H1-7.	.65(16M)18.39	M) 18.	. 39 :	(4M)	(4M)59 (8M)-1.45(16M)-1.19	3M)-1-4	5 (16M).	-1.19	14) :	1155	- 8M	1-1.51	(16M)	-2.40 :
		139.1	92M3***	0) **	BSERVED DATA):	ED 04	TA):	(39.1	92M146.	50 (08	SERVED	DATA	: (39	(39.192M)67.72 (OBSERVED DATA)	67.72	(085	ERVED	DATA) :
(1/1)*10	••	-(H+)	10.1 (8	11-(H	.3 (1	-(M9	12.1:	(4M)-	1.58 (8	3H1-1.9	M91) E	1 79	: (41	11-1.49	(8H)	1-2.00	116M	-1.58:
USTAR	••	(4H).	(4M).2176 (8M).210	M) .21	.02 (1	6M).	02 (16M).0000:	(4H)	(4M).2624 (8M).2664 (16M).2406:	3M1.266	4 (16M	1.2406	*	11.3414	( 8H)	.3480	W91)	.3375:
		QX :	N.S.	TEMP	516		16E :	2	S.M.	TEMP	SIGA	SIGE	3		1	EMP	SIGA	SIGE :
HEIGHT (M)	=	:(050):	(N/S)	3	(DEC)		(DEG): (DEG)	( DEC )	(M/S)	(3)	(C) (DEG)	(DEG): (DEG)	: ( DE	(H/S)		(C) (DEG)	DEG	(DEG):
1.				70	0		*			23						96.		
2.	••	63.	1.55	8	_	1.	••	35.	2.51	24			: 26			.62	12.4	••
;	••	53.	1.75	-1.0	_	.3	••	25.	2.86	62			91 :			04.	11.8	••
	••	63.	1.86	-1.18	_	14.9	9.4:	33.	3.16	83	11.9	6.9	. 24.		10.4	18	11.4	6.9
16.	••	51.	16.1	-1.6			11.5:	19.	3.39	-1.50		6.7				74	11.2	6.0:
32.	••	58.	1.97	6	_		••	78.	3.54	-1.54						1.36		•
48.	••	63.	1.93		15		14.5:	32.	3.67		10.3	7.9					9.8	8.1:
	-									-		-	-	-	-			

LEAST SQUARES FITTED DATA

	••	NS	TEMP	*	SIGE		MS	TEME		SIGE	••	MS	TEME	SIGA	SIGE
HEIGHT (M)	••	(M/S)	5	(DEC)	(DEG)		(M/S)	3	(DEG)	(DEG)	••	(N/S)	3	(DEC)	(DEG)
1.0		1.56		-	5.8		2.40	19		5.7		3.21	*8*		5.1
2.0	**	1.63			8.9	••	2.60	31		0.9	••	3.44	69.		5.5
4.0	••	1.71	•	_	8.1	••	2.82	53		4.9	••	3.70	24.		5.9
8.0	••	1.79		15.9	9.5		3.05	92	15.1	1.9	••	3.97	08		6.3
16.0	••	1.87		_	11.2		3.31	-1.46		7.1	••	4.26	83		6.9
32.0	••	1.96		_	13.3	••	3.58	-1.55		7.5	••	4.58	-1.35		7.3
48.0	••	2.01	1.45	-	14.6		3.76	34		7.7	••	4.17	57	10.1	7.7
	-	20/00	DU/02 0TH/02	BU* 100	RI		20/00	OTH/02	80*100	RI	-	20/00	DTH/D2	BU*100	RI
4.0		.0261	0727	-1.438			.0751	0922	666	17		.0879	1188	498	15
8.0	••	.0137	0398	.01370398 -2.873	-1.23		1040.	0668	-1.648	-1.45	••	.0472	0934	-1.362	92
16.0	**	.0072	.0262	906.9		••	.0220	0160	-1.347	-1.86	••	.0253	0428	-2.168	-3.39
39.2#	••	0025	.1574	227.556		••	1800	.0853	36.413	00	•	0056	0505	15. 350	00

\* OBSERVED DATA

OBSERVED DATA	ATA																		1
		DATE 01/03/77 WEATH TEMP DE DEW POINT DE	MEATHER TEMP DEG C POINT DEG C	ER TI	3.5 -1.4	00:00		DATE OL/O3/ WEA TEMP DEW POINT	WEATHER WEATHER TEMP DEG C	TIME C C	TIME 17:00:00 C 2.5 C -8.1	00:	40	DATE 01/03/ WEA TEMP DEW POINT	V + 0 0	7 TIME HEP S+ EG C -	£ 18:00:00 -2.2 -3.0	0::0	
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSCN ND. (1/L)*10 USTAR		LCW 2 MID LCW 1220 M A= .02 B= (4M)11 (4M) (4M)31 (4M) (4M)31 (4M)	E 00 00	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 HI 5 HI 9(16 9(16 0 (1	3 3 M)56 ED DATA): 6M)38:		3 5 555	110 0 MI 8 B = 1 (8 (8 (8	- 00	101 101 6M)	9 ATA)	LOW   A   W   W   W   W   W   W   W   W	COW 10 MID COW 10 MID A=07 B= (4M) (4M) (4M)	8 8 W 1 C 8 C 8 C 8 C 8 C 8 C 8 C 8 C 8 C 8 C	* *	HI TOTL HI HI P= .24 WW/CM2 (16M) (16M) (16M)	OATA):	
HEIGHT (M)	=	: WD	WS (M/S)	TEMP (C)	SIGA (DEG)	SIGE: WD (DEG)	.:0		WS T (W/S)	TEMP S	SIGA (DEG)	SIGE: WD	300:		WS (M/S)	TEMP (C)	SIGA (DEG)	SIGE :	1
1.		225	17.	- 12	2 15.5			325. 1	63		0		3.5	350.	96		4 8		
	• ••	324.	4.42			. ~			1.32		8.5		33		2.30		7.6		• ••
. 8 16.		332.	4.82	40		5.0:			1.49		7.3	4.6:			2.59		7.1	3.9	
32.		319.	5.98		15.7				1.96		4.6	5.5			3.63		4.9	3.0:	
LEAST SQUARES	RES	FITTED DATA	DATA																!
HEIGHT (M)		HS (H/S)		TEMP (C) (	SIGA (DEG)	\$16E (DEG)		WS (M/S)	TEMP (C)		SIGA DEG) (	SIGE DEG1		WS (M/S)	TE C	4	SIGA DEG1	SIGE (DEG)	
1.0		3.57			14.8	4.3		.93		11.8		3.8		1.63			9.4	9.6	
2.0		3.92		010	15.0	4.4		1.08		0.01		0.4		1.92			8.0	1.6	
000	• ••	4.72	2 48	68	15.4	4.0	• •	1.46		7.3		7.4		2.66			7.7	0.4	
16.0		5.18			15.6	4.9		1.69		•		4.7		3.13			6.9	3.8	••
32.0	••	5.68			15.8	2.0	••	1.96		5.3		6.4		3.68			6.5	3.0	••
48.0	••	0.9	0 -1.29		16.0	2.1		2.13		+		2.1		4.05			6.3	5.6	••

I : 0U/DZ 0TH/DZ 8U\*100 RI : DU/DZ 0TH/DZ 8U\*100 RI

.0725 .0427 .0381

.0620 .0359 .0208

-.05 -.29 -1.12

-.164 -.450 -.860 1.840

.1335 -.0528 .0732 -.0436 .0402 -.0250 .0306 .0108

4.0 8.0 16.0 39.2\* \* OBSERVED DATA

DTH/DZ BU\*100 R

20/00

CLD (TENTHS) CLD HT (M) EXPONENTS NET RACIATION RICHARDSON NO (1/L)*10 USTAR		DEM POINT VISIBIL OM 10 M 10 M 12 M 12 M 13 M 14 M 15	A T T T O B O T T T T T T T T T T T T T T	- 430	-2.3 -3.4 4 TOTL HI = .29 //CM2 (16M)	LOAT		SI 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	NT D	EG C FG C (MI) 1 HI D S 22 P= 63 MW/C M) (OBS	C -2.9 C -4.3 J 10 HI TOTL MW/CM2 (16M) (16M)	TL 13	C (49)	TE POLI 10 M POLI 10 M 10	SE SESTING		C -2.9 C -4.2 HI TOTI HI HI P= .24 MW/CM2 (164) (164)	FL 13
HEIGHT (M)	: ND:	1	WS (W/S)	TEMP (C.)	SIGA (DEG)	SIGE (DEG)	! " "	(DEG)	WS I	TEMP (C) (	SIGA DEG)	SIGE (DEG)	SEG :	=	1	TEMP (C) (	SIGA DEG)	SIGE (DEG)
2. 4. 8. 16. 32. 48.	299 289 2896 2886 2886 301		1.92 2.56 2.87 3.68 4.24 5.21		9.5 8.5 9.9 9.9 9.9	4 4 4 4	! !	318. 307. 314. 303. 301.	2.97 3.87 4.91 7.00		0-044	33.7.	319		3.19 4.18 4.70 5.14 7.11		2 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	44ww
LEAST SQUARES HEIGHT (M) :		FITTED DATA	DATA TEM		S I GA	\$16E		WS (W/S)	TEM		SIGA DEG)	SIGE (DEG)		WS WYS)	CO		SIGA DEG) (	SIGE
2.0		1.61			9.0	4.5.0		3.05		0 81	9.0	8 6 0		2.82		01		5.8
8.0 16.0 32.0 48.0		2.96 3.63 4.46 5.02			6 4 9 9	4 4 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		4.36 5.21 6.23 6.92		6 N W 4	4000	23.73		4.62 5.44 6.41 7.06		2011	26.43	34.95
	°   .	20 / NO	DTH/D2	8	)* 100	۳ ا	- -	20/00	DTH/02	1 1	8U*100	1 2	na .	1213	DTH/02	80*	80*100	7
16.0		.1015						.1304						.1270				

-
Ø
-
4
-4
0
-
0
_
VE
-
œ
SE
10
•,
~
80
-

100 101 101 101	16E :: 0EG): 4.6: 3.5: 2.8:
TIME 00:00:00  C -2.7 C -3.4 J .75 HI TOTL 10: P= .20 MW/CM2 (16M) (16M) (16M) (16M)	TEMP SIGA SIGE: (C) (DEG) (DEG): 6.7 5.2 5.0 4.6 4.4 3.5: 3.4 3.7: 2.9 2.8:
TIME G C G C MI) . 75 MI) . 75 WI/CN 1 (OBSE	CO
DEW PCINT DEG C -2  TEMP DEG C -3  VISIRILITY (MI) .75  OW 10 MID HI  LOW 120 MIC HI  A=24 B=23 P=  5.79 MW/CM2  (4M) (8M) (11  (39.192M) (085ER)  (4M) (8M) (10	WS (M/S) 4.22 6.27 6.27 7.15
: DATE 32/03/77 TIME 03:00:00  : MEATHER S2.7  : DEW PCINT DEG C -3.4  : VISIRILITY (MI) .75  10:LOW 10 MID HI HI  : LOW 120 MID HI HI  : A=24 B=23 P= .20  : (4M) (8M) (16M)  : (4M) (8M) (16M)  : (4M) (8M) (16M)  : (4M) (8M) (16M)	WD (DEG) 281. 273. 278. 266. 268. 275. 275.
0 -	TEMP SIGA SIGE: WD (C) (DEG) (DEG): (DEG) (DEG): (DEG) (DEG): (DEG) (DEG): (DEG
DATE 01/03/77 TIME 23:00:00  WEATHER S- TEMP DEG C -2.6  VISIBILITY (MI) 1.5  LOW 10 MID HI TOTL 1  LOW 150 MID HI HI  A=20 B=23 P= .20  (4M) (8M) (16M)  (4M) (8M) (16M)  (4M) (8M) (16M)	SIGA (DEG) 7.3 6.7 6.3
777 TIM ATHER S DEG C DEG C DEG C V (MI) I MID23 P=23 P=23 P= (BM) (DB	CO GE
: DATE 01/03/77 TIME 23:0  : WEATHER S2.6 : DEW POINT DEG C -3.5 : VISIBILITY (MI) 1.5 10:LOW 10 MID HI TO : LOW 150 MID HI HI : A=20 B=23 P= .20 : (4M) (8M) (16M) : (4M) (8M) (16M) : (4M) (8M) (16M) : (4M) (8M) (16M)	2.46 3.65 3.80 4.51 4.51 6.62
DATE 01/03  WE POINT VISIBILIT LOW 10 MID LOW 150 A=20 B= (4M) (39.192M)	WD (DEG) 305. 294. 300. 289. 289. 299.
1:00	SIGA SIGE: WD DEG) (DEG): (DEG) 7.7 : 305. 6.6 : 294. 6.1 3.8: 300. 4.9 3.2: 289. 4.2 2.8: 289. 3.2 2.5: 299.
NE 22:00:00   S	SIGA (DEG) 7.7 7.7 6.1 6.1 4.9 4.2
77 TIMER S DEG C DEG C (MI) (MI) HI HI 11D23 P=23 P= 8M) (OB	C)
DATE 01/03/77 TIME 22  WEATHER S- TEMP DEG C -2. DEW POINT DEG C -3. VISIBILITY (MI) 4 DW 10 MID HI HI LOW 245 MID HI A=26 B=23 P= .2 (4M) (8M) (16 (39.192M) (0BSERV (4M) (8M) (16 (4M) (8M) (16	2.63 3.74 4.74 4.74 6.71
DAT DE CONTROL	(DEG) (DEG) 304. 293. 298. 287. 288.
20	
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION : RICHARDSON NO.: (1/L)*10	4. 2. 4. 8. 16. 32. 48.

LEAST SQUARES FITTED DATA

SIGE :	2 :	•• 1	2 :	2 :	8	3 :	. 0		"	••	••	••
	7.2	.9	5.	4.	3.	3.	3.	2				
SIGA (DEG)	7.9	6.7	5.6	4.8	4.0	3.4	3.1	BU*100				
TEMP (C)								DTH/DZ				
WS (M/S)	3.52	4.05	4.65	5.36	91.9	7.09	7.70	20/00	.2185	.1257	.0723	.0275
	••	••	••	••	••	••	••			••	••	••
SIGE (DEG)	6.7	5.7	6.4	4.2	3.6	3.0	2.8					
SIGA (DEG)	8.9	7.7	1.9	5.8	5.1	4.4	4.1	BU*100				
TEMP (C.)								DTH/D2				
WS (W/S)	2.44	2.80	3.22	3.69	4.24	4.87	5.28	20/00	.1487	.0854	0640.	.0300
	••	••	••	••	••	••	••			••	••	••
SIGE (DEG)	6.1	5.5	4.4	3.8	3.2	2.8	2.5	R I				
SIGA (DEG)	9.6	8.1	8.9	5.7	4.7	4.0	3.6	BU*100				
TEMP (C.)								DTH/DZ				
WS (M/S)	2.54	2.92	3.35	3.85	4.42	5.07	5.50	20 / NG	.1550	.0890	1150.	.0469
	••	••	••	••	••	••				••	••	••
Î												
HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0		4.0	8.0	16.0	39.24

_
⋖
F
2
_
0
=
VE
a
S
98
=

	: DATE	: DATE 02/03/77 TI	11 11	ME 01:00:00		DATE 0	: DATE 02/03/77 TIME 02:00:00	TIME	05:00		DATE	: DATE 02/03/77 TIME 03:00:00	TIME	03:00	: 00:
		MEA	MEATHER	S-	••		MEATH	WEATHER S-		••		WEATHER	ER S-		•
		TEMP	TEMP DEG C	-2.2			TEMP DE	၁ ၁	-2.9	••		TEMP DE	2 9	-2.9	
	. DE	DEM POINT DEG C	DEG C	-3.9	••	DEW P	DINT DE	ပ ၁	-3.2	••	DEW P	CINT DE	0 0	-3.2	••
	: VIS	VISIBILITY (MI)	(IM)	0.75	••	VISIB	VISIBILITY (MI) 0.75	.0 (IM	75		VISIE	VISIBILITY (MI)	MI)	2	••
CLC (TENTHS)	*07:	STOM TO MID	H	TOTL		ON 10	MID	Ï	TOTL		DILOW 10 MID	MID	Ħ	TOTL	10:
CLD HT (M)	F07 ::	OIM 06	011	H	••	LOW	: LOW 120 MID HI		Ŧ		LOW	: LOW 305 MID HI		H	••
EXPONENTS	: A= -	A=15 8=17 P= .23	- 117 P	= .23	••	A=2	.2 8=	20 P=	.20		A=	.e B=	18 P=	.23	
NET RADIATION		1	3.05 MM	/CM2	••		7.2	S MW/C	M2			4.6	JAM L	M2	••
RICHARDSON NO.:	( W+) :		( 8M)	(16M)	••	( W+)	(8M	-	(16M)		(M4)	181	-	(16M)	
	: (39.	192M1		(OBSERVED DATA): (39.192M)	DATA):	(39.15	12M1	(085	ERVED	TAC	(39.19	12M1	(08	ERVED	DATA):
(1/1)*10	( 4M) :			(16M)		( K+)	(8H	-	(16M)		( M )	( 8M)		(H91)	
USTAR	. (4M)	(4H)	( BM)	(16M)	••	( M )	(8M)		: (164)	••	) (M):	( 8M)		(H91)	•
	QN .	HS			\$16E :	2	MS	TEMP	SIGA	316E :	Q.M	N.S.	TEMP	TEMP SIGA SIGE :	SIGE :
HEIGHT (M)	: ( DEC )	(N/S)	(3)	(DEG) (DEG):(DEG)	( DEG) : (	10501		1 (3)	(C) (DEG) (DEG):(DEG)	( DEG) : (	( DEG )	(N/S)	0	(C) (DEG) (DEG):	(DEG):
2.	: 288.	4.42	~	8.6		299.	2.85		7.5		305.	3.33		6.8	
4.	: 279.	4.49	•	7.0		: 290.	3.89		8.9	••	: 295.	4.89		7.0	
8.	: 285.	6.12	~	1.9	4.6:	294.	4.02		5.6	4.3:	301.	5.13		9.6	3.7:
16.	: 273.	6.78		5.9	3.4:	284.	4.82		2.0	3.6:	290.	6.22		2.0	2.9:
32.	: 274.	80.8	3	5.5	3.4:	284.	4.81		4.5	3.2:	291.	6.71		3.8	2.8:
48.	: 283.	8.84		5.1	3.3:	295.	6.05		3.7	3.0:	302.	1.44		3.0	2.6:
					-						-			-	

LEAST SQUARES FITTED DATA

(DEG) : (M/S) (C) (DEG) (DEG) : (M/S) (C)  6.0 : 2.67		••	S#	TEMP		SIGE	••	S	TEMP		SIGE	••	N.	TEMP		SIGE
3.58       9.0       6.0       : 2.67       9.0       6.55       : 3.17         4.21       8.1       5.4       : 3.07       7.7       5.6       : 3.71         4.95       7.2       4.8       : 3.52       6.6       4.9       : 4.34         5.8       6.84       5.3       : 4.64       4.9       : 5.08         8.04       5.3       3.4       : 5.33       4.2       3.2       : 6.97         8.04       4.9       3.2       : 5.78       3.2       : 6.97         8.84       4.9       3.2       : 5.78       3.0       : 7.64         5.78       4.2       3.2       : 6.97       7.64         5.78       3.9       3.0       : 7.64       7.64         5.78       5.78       3.9       : 0.0/02       7.64         5.681       5.78       5.78       5.289       1.339         5.568       5.68       5.78       5.789       5.789         6.97       5.589       5.789       5.789       5.789         6.97       5.789       5.789       5.789       5.789         6.97       5.789       5.789       5.789       5.789	HEIGHT (M	-	(M/S)		(DEC)	(DEG)		(M/S)	3	(DEG)	(DEC)	••	(M/S)		(DEC)	(DEG)
4.21       8.1       5.4       3.07       7.7       5.6       3.71         4.95       7.2       4.8       3.52       6.6       4.9       4.34         5.82       6.5       4.3       4.04       5.7       4.2       5.08         6.84       5.8       3.8       4.64       4.9       3.7       5.95         8.04       5.3       3.4       5.33       4.2       3.2       6.97         8.84       4.9       3.7       5.95       7.64         9.04       5.7       4.2       3.2       6.97         100/02       01/02       01/02       01/02       01/02       01/02         1576       1576       1.626       1.339       1.339       1.339         100/02       1576       0933       1.339       0775       0775       1.339       1.339	1.0		3.58		9.0	6.0		2.67		0.6	6.5		3.17		9.2	5.1
5.82 6.5 4.3 : 4.04 5.7 4.2 : 5.08 6.84 5.7 4.2 : 5.08 6.84 5.8 3.8 : 4.04 5.3 4.2 : 5.08 6.97 6.84 6.9 3.7 : 5.95 6.97 6.84 6.9 3.2 : 6.97 6.97 6.84 6.9 3.2 : 6.97 6.97 6.84 6.9 3.2 : 6.97 6.97 6.84 6.9 3.2 : 6.97 6.97 6.84 6.9 6.97 6.97 6.97 6.97 6.97 6.97 6.97	2.0		4.21		8.1	5.4		3.07		7.7	5.6	••	3.71		7.7	4.5
5.82 6.5 4.3 : 4.04 5.7 4.2 : 5.08 6.84 6.84 5.8 3.7 : 5.95 6.97 6.84 6.9 3.7 : 5.95 6.97 6.94 6.9 3.2 : 6.97 6.97 6.97 6.97 6.97 6.97 6.97 6.97	4.0	**	4.95		7.2	4.8		3.52		9.9	4.9	••	4.34		4.9	4.0
6.84 5.8 3.8 : 4.64 4.9 3.7 : 5.95 6.97 8.04 5.33 4.2 3.2 : 6.97 7.64 7.9 3.0 : 7.64 7.00 8.1 : 00/02 0TH/02 0.093 : .18390784 : .0456	8.0		5.82		6.5	4.3		4.04		5.7	4.2	••	5.08		5.4	3.5
8.84	16.0	••	6.84		5.8	3.8		49.4		6.4	3.7		5.95		4.5	3.1
### 8.84	32.0	••	8.04		5.3	3.4		5.33		4.2	3.2		6.97		3.7	2.7
: 00/02 DTH/D2 BU*100 RI : 0U/D2 DTH/D2 BU*100 RI : 0U/D2 DTH/D2 DTH/D2	48.0		8.84		4.9	3.2		5.78		3.9	3.0		1.64		3.4	2.5
: .2681 : .1576 : .0927 : .0475 : .0475		"	20/00	1		R I		!	20/HT0	BU*100	RI		20/00	DTH/DZ	BU*100	2
: .1576 : .0933 :0927 : .0536 : .0475 : .0475	4.0	"	.2681					.1626					.2289			
: .0927 : .0536 : .0475 : .0475	8.0		.1576					.0933				••	.1339			
: .0475	16.0	••	.0927				••	.0536				••	.0784			
	39.5*	••	.0475					.0775				••	.0456			
* UBSEKKED DA A	*	OBSE	RVED DAT	A								1				

CBSERVED CATA	TA															
	40 0>	ATE 02 T DEW PO	DATE 02/03/77 T MEATHER TEMP DEG C DEW POINT DEG C	F 200	NE 04:00:00 S- -3.3 -4.6	00:0	DATE	ATE 32/03/77 WEATHER TEMP DEG DEW POINT DEG	1 1 2 0 0 M	NE 05:00:00 S- -3.1	00:0	DEW	02/ 02/ TE	THER DEG DEG	TIME 06:3 S- 3.2 C -4.2 C -4.2	3.2
CLD (TENTHS) : CLD HT (M) : EXPCNENTS : NET RADIATION : RICHARDSGN NO.: (1/L)*10 : USTAR :	DIA COOC	DW 10 MID LOW 305 N A=24 B= (4M) (4M) (4M)	10 MID 305 MID .24 B=17 10.88 (8M) 192M) (8M)	- 43 O	TOTL HI 1/CM2 (16M) (16M) (16M)	TL 10:	LOW 10 M LOW 12 A=21 (4M) (4M) (4M)	2 4 5 5	****	HI TOTL HI HI P= .18 MW/CM2 (16M) (16M) (16M)	TL 10 DATA)	LOW A= - (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44) (4 44)	0W 10 MID 0W 0 90 1=19 R= (4M) (4M) (4M)	1D 23 8M) 8M)	CM2.2	73TL 13: 2 M) M) E9 9AT4): 6M)
HEIGHT (M)	: WD	!	WS (M/S)	TEMP (C)	SIGA (DEG)	SIGE :	WD (DEG)	WS (M/S)	TEMP (C)	SIGA (OEG)	SIGE (DEG)	. (DEG)	WS (M/S)	TEMP (C)	SIGA (DEC)	SIGE :
2. 4. 8. 16. 48.	316 306 312 312 302 301		3.84 5.20 5.89 6.17 7.75		3 3 4 8 8	3 9 8 2 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	325. 314. 321. 312. 310.	5 - 16 5 - 16 6 - 34 8 - 39		0 4 4 4 W W	2 2 3 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	308. 297. 292. 293. 304.	3.92 5.62 5.90 6.71 8.47		0 0 0 0 4 W	3.7:
LEAST SQUARES FITTED DATA  : WS  HEIGHT (M) : (M/S)	ES FI	TTED WS	DATA TEM (C)	١	SIGA DEG) (	\$16E :	SE		TEMP	\$16A (DEG)	\$16E (DEG)		WS (M/S)	TEMP (C.)	S I GA	S16E :
1.0 2.0 4.0 16.0 32.0		3.53 4.12 4.81 5.61 6.55 7.64			2 4 4 5 6 6 8 8 1 4 1 8 6 6 8 8 1 4 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8	23 3 4 4 5 3 4 4 4 5 4 3 4 4 4 4 4 4 4 4	3.91 4.42 5.66 5.66 7.24 7.24	001 001 001 001 001 001		0 0 0 0 0 m m m	22.33.00		3.71 5.01 5.83 7.88 60		- 80.044 - 80.000	223345

\* OBSERVED DATA

: DU/02 DTH/DZ 8U\*100

: DU/DZ DTH/DZ BU\*100

DU/02 DTH/DZ 8U\*100

.2529 .1470 .0855

> .2060 .1165 .0659 .1094

> .2487 .1451 .0847

4.0 8.0 16.0 39.2\*

15
4
-
d
0
0
u
>
œ
ш
SE

••	••	••	••	••	:	••	••	••	••	:		. 9		-	••	••	••		::	:9	:
00:0					10				12	DATA	0	•636	S16E	(C) (DEG) (DEG):				4.	4.1:	3.	3.
TIME 12:00:00		1.0	-5.6		TOTL	=	14	•	16M)	VED	16M)	16M)	GA.	(9)		6.9	5.8	4.9	4.3	3.8	3.2
ME	I	7	•	S		_		/CM2	0561	BSEF	80	16	S	0	0	.2	9	4	0	+	1
	ER	ပ ၁	0	HI	H		11 P	18.07 MW/CM2		0) 1	-	1.63	TEMP	3				+9.	.2	4.1	4.
3/77	WEATHER	TEMP DEG C	T DE	17	0	OIN		18.0	(8M	9.	(8 M	(8M				53	69	25	35	20	85
0770	3	TEM	NIOC	311	IW C	1220	22 8:		02	92M1	900-	5 5 2 4	3	(M/S)		7.	8	9.52	10	==	11.
: DATE 02/03/77			DEW POINT DEG C	VISI	H OIM OI M	LOW 1220 MID	A=22 B=11 P=		(M)	39.1	(M+	+M) .	ç	EG)		51.	+1.	.64	36.	36.	.64
0 :					MO1:01		Ä :		-	-	-	-		0		. 3	. 3	. 3	. 3		3
00									. 42	ATA	29	(4M).3408 (8M).3422 (16M).3440: (4M).3986 (8M).3980 (16M).4026: (4M).6524 (8M).6376 (16M).6366:	1GE	(DEG):(DEG)				4.5: 349.	4.2	4.1	4.4
:00:		3	4		TOTL		4		=	ED C	(M9	6M)	A	_		.5	6.	6.9	.3	6.	6.
TIME 11:00:00	T	-1-	-4-	2		Ξ	1.	CM2	9110	SERV	1 8	10 0	816	( DEG							
	~	ں	ပ	1	H		A=13 B=03 P=	14.44 MW/CM2	2	(08	2	.398	EMP	(C) (DEG)	.06	.17	.18	31	55	1.25	1.24
111	WEATHER	DEG	DEG	M - W		OIL	0.1	4.44	( 8M)	1.34	( 8M)	( 8M)		!							
DATE 02/03/77	ME	EMP	TNIC	111	10:LOW 10 MID H	1220 MID	1 8=	-	10	F	17	986	S	(M/S)		4.4	5.0	5.56	1.9	6.7	6.9
E 02			M P	5181	10	12	13		-	192	-	1.39									
DAT			DE	1	TOM	LOW	H A		M +	(39	A4	( 4 M	3	DEG		349	340	348	335	335	347
	••	••	••	••	10:	••	••	••	: 98	A):	.25:	:04	 	: (9	••	••	••	4.5: 348.	:0:	::	. 3:
0:0					TOT				•	DAI	-	1.34	SIG	00							
10:0		2.1	7.5		10	Ħ	.15	2	16M)	RVED	(16M	W91)	IGA	(DEG) (DEG):(DEG)		6.8	5.8	4.9	4.3	3.4	2.5
ME	I	1	1	2	_		=	I/CM	500	38 SE	.29	+55		0	0.7	13	11	96	11	13	4
: DATE 32/03/77 TIME 10:00:00	ER	0	0 9	IN	I		A=29 B=38 P=	10.12 MW/CM2	-	0	=	11.34	TEMP	3	-1.20	-1-	-1.17	-1.54	-1.	-2.33	-2.1
3/77	MEATHER	TEMP DEG C	T DE	TY (	9	305 MID		1001	8	1.2	8	(8)	NS.	21		3.82	4.29	15	23	18	22
0770	T	TEM	DEM POINT DES	VISIBILITY (MI)	TO MID	305	29 B		08	92M)	23	3408	3	(M/S)		3.	4.	4	5	5.81	•
ATE			DEW	VISI		*			(M)	39.1	CM+	4M).	ę	EG)		354.	344.	352.	339.	339.	351.
0 :					*C 7:	· LOM	. A		-				Q.	:( DEG)		. 3	. 3		. 3	. 3	. 3
					15			ION	RICHARDSON NO.:		0			£							
					NTH	3	ITS	TAIC	NOSC		1*1	a.		=	-	2.	4.	8	16.	32.	48.
					CLD (TENTHS)	CLD HT (M)	EXPONENTS	NET RADIATION	HARC		(1/1)*10	USTAR		HEIGHT (M)					-	E)	4
					CLD	CLD	EXP	NET	RIC					I							

LEAST SQUARES FITTED DATA

S	SIGA	_
EG) : (M/S)	(0EG) :	(DEG) (DEG) :
•	10.5 :	10.5 :
	8.1 :	7.1 8.1 :
	6.3 :	5.8 6.3 :
	. 8.4	. 8 4 8 .
.7 : 6.08		3.9 3.7 :
	2.9 :	3.2 2.9 :
	2.5 :	2.9 2.5 :
70/no : 1	. I.A	
	. 40	. 40
50 : 0899	.39820 : .089	39820 :
	72 :	70272 :
••	. 00•	3.382 .00 :

		DATE 02/	02/03/77	TIME	00:00:20		DATE 02	103/17	I I ME	00:00:80		DATE 02/		TIME 39:33:3	3:33 :
	••		MEATHER			••		WEATHER			••		-	-MS	••
	••	TE	TEMP DEG C			••	I	DEG	1			TE	DEG	c -3.1	•
	••	DE# POINT	INT DEG			••	DEM PO	EG	-5		••	DEW PCINT	9EG	c -5.5	•
	••	VISIBIL	VISIBILITY (MI)	0.75		;	VISTBILITY	E	1 1.5		;	VISIBILITY	E E	5.0	
CLD (TENTHS)	:	9	dip		101	10:1	01 40		-	101	7:0	01 40			: 61 766
CLO HT (M)	••		0 (	•				0 M 0	Ī.			*	1	i c	•
EXPONENTS	••	A=26	20	11			A=20	41 9	61.			A=30	1	47· =4	•
NET RADIATION	••			MW/CM2		••		+0.1-	MW/CM2				3	MW/CM2	•
RICHARDSON NO.	:	(4M)01	_	.03(16M	36.		(4M)	(M8) 10	00(16M)	0.		4M) C	8	05(16M)	32 :
	••	-		SE	0	: 7	192	41 .15	LLI	DA		_	•	COBSERVED	04T41:
(1/1)*10	••	(4M)03	( 8M)	2	-	:09.	·	2 (8M)				_	8	08 (16w	:10 1
USTAR	••	(4M).3238	( 8M)	.3043 (16M)	M).1771	11:	(4M) .345	. ( 8M) .	3420 (16M	41.2937	1: (	441.2575	(8	41.2669 (164).	1.2718:
		OM.	WS TE	TEMP SIGA	SIG		OM	STE	MP SIGA	SIGE		GM	S	MP SIGA	\$16E :
HEIGHT (M)	::	~	-	(DEC)	10E		DEG) (1	M/S) (C	) (DE	(DEG)		•	M/S) (C	(DEG) (	DE
			-2	-2.93				-2	74					.75	
2.		320. 3	3.62 -2	. 9	4	••	326.	06.	.55 6.	6		30.	'	1.9 89	••
4				2		••		71 -2	36 5				•		•
				20 4	3		322	5.21 -2	54 4.9			326.	3.80 -2	2.87 5.4	4.7:
. , .				, ,	, "			01	,						
10.			2 66 6 7	100	000			7- 16.	000	200				<b>.</b>	2 7 .
• 26					,			7- 67.	000	0 (					
• 24	.		5.23	.7	7	. !	319.	1,.,	3.	-	. !		90.0	4.7	1
LEAST SQUARES		FITTED DAT	DATA												
		MS	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE		SE	TEMP	SIGA	\$16F :
HEIGHT (M)	••	(#/8)	3	(DEG)	E G		(M/S)	3	(DEG)	(530)		(W/S)	(3)	(050)	: (530)
1.0		3.04	-2.60	7.5	6.8	:	3.49	-2.53	7.7	5.5		2.40	-2.61	α.	14.5 :
2.0	••	3.59	-2.65	6.3	5.6	••	3.98	-2-	1.0	4.7		2.83	.6	7.2	9.8
4.0	••	4.25	-2.72	5.3	4.6	••	4.54	-2.	5.9	4.3		3.33		5.8	: 1.9
8.0	••	20.5	-2.79	4.4	3.8	••	5.19	-2.65	5.1	3.9	••	3.92	-2.85	4.7	4.5 :
16.0	••	5.93	-2.65	3.7	3.2	••	5.92	-2.	4.5	3.5		4.62	0.	3.8	3.1 :
32.0	••	7.02	-1.28	3.1	5.6	••	91.9	-2.	3.9	3.2		2.44	-	3.1	2.1 :
48.0	••	7.74	1.56	2.7	2.3		7.30	-2.	3.0	3.0		5.98	8	2.7	1.7 :
		20/00	DTH/DZ	BU*100	2		20/00	DTH/D2	80*100	x		20700	DIHIOZ	RU*100	FI :
4.0	!	.2380	0130	045	01	!	.2010	0371	020	01		.1821	3229	120	03 :
8.0	••	1041.	.0156	.144	00.	••	.1147	i	600	00		.1072	0159	239	: 01
16.0	••	.0832	.0729	1.920	0	••	.0655	•	.290	00.		.0631	0018	377	32 :
39.2*	••	.0850	. 1820	17.918	0		.0883	.0332	3.840	00.		-	.0253	4.280	. 00.
* 08	SER	OBSERVED DATA				-					-				

A
-
A
0
_
0
w
>
œ
m
S
08
0

10 10 112 114 114 108	\$16E (0EG) 4.4 4.1 3.6
100:00:00:00:00:00:00:00:00:00:00:00:00:	
12:00:00 0.1 5.6 TOTL 10 14 2 16M)12 RVED DATA) (16M)08	0.0 4 4 W W W W W W W W W W W W W W W W W
TIME 12:00:00  R H C -0.1 C -5.6 I) 5 HI TOTL 10 HI W/CM205(16M)12 (0BSERVED DATA)08 (16M)06	1 !
TIME  C C C C C C C C C C C C C C C C C C C	C) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1
A C C C C C C C C C C C C C C C C C C C	CC)
DATE 02/03/77 TIME 12:00:00  WEATHER H  TEMP DEG C -0.1  DEW POINT DEG C -5.6  VISIBILITY (MI) 5  CW 10 MID HI TOTL 10  LOW 1220 MID HI TOTL 10  LOW 1220 MID -0.14  A=22 B=11 P= .14  18.07 MW/CM2  (4M)02 (8M)05(16M)12  (4M)06 (8M)08 (16M)08  (4M)06 (8M)08 (16M)08	
02/03/ WEMP POINT 18 IL ITY 10 MID 1220 M .22 B= 18 02 ( 192M) 06 (	7.53 8.59 9.52 11.50
100 100 100 100 100 100 100 100 100 100	
DATE 02/03/7  MEAT  TEMP D  DEW POINT D  VISIBILITY  ON 10 MID  LOW 1220 MI  A=22 B= -  18.  (4M)02 (8  (4M)02 (8  (4M)06 (8  (4M)06 (8)	MD DEG1 349.
	10 mmmmm
10: 20: 20: 20: 20:	SIGE: WD (DEG):(DEG) : 351. : 341. 4.5: 349. 4.2: 336. 4.1: 336.
:00 L 10 DATA)	S10 100 4444
	!
11 14 H	SIGA (DEG) 7 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 -
TIME 11:00  C -1.3  C -4.4  I) 5  HI TOT  HI HI  MW/CM2 20(16M)  (085ERVED 28 (16M) 3980 (16M)	2 - 8 - 1 2 4
E COULT E E COUR	TEMP (C)
DEW POINT DEG C DEW POINT DEG C VISIBILITY (MI) W 10 MID HI OW 1220 MID HI =13 B=03 P= 14.44 MW/ 4M)07 (8M)2 4M)21 (8M)2 4M)21 (8M)2	
02/03/77 WEATHE TEMP DEG POINT DEG BILITY (M 0 MID 1220 MID 13 B=0 14.4407 (8M) 92M) 1.34	XX XX XX XX XX XX XX XX XX XX XX XX XX
02/03 WE TEMP POINT 10 MID 1220 13 B= 1 - 07 192M)	£ 400000
DATE 02/03, WE, WE, VESTRILITY VISIBILITY VI	
DEW VISI LOW LOW A= (4M)	MD DEG)
L 10:	166 : DEG): 4.5: 4.0: 3.1: 2.3:
ME 10:00:00 : :	
ME 10:00  -2.1  -7.5  5 TOT  HI  -15  CM2  20(16M)  8 SERVED  29 (16M)	S 1 GA (DEG) 6 .8 5 .8 4 .9 2 .5
SER 5	Sol
HI H	(C) -1.20 -1.13 -1.17 -1.77
02/03/77 TIME I MEATHER H TEMP DEG C -2 POINT DEG C -7 IBILITY (MI) 5 10 MID HI 305 MID HI 29 B= -38 P= . 10.12 MW/CM2 08 (BM)20(1 192M) 1.20 (DBSER 23 (BM)29 (	CO C
2/03/77 MEATHE OINT DEG OINT DEG ILITY (M MID 305 MID 9 B=3 10.12 .08 (8M) 2M) 1.20 .23 (8M) 408 (8M)	202222
02/03, TEMP TEMP POINT 19 HID 305 .29 B= 192M) 28	M M M M M M M M M M M M M M M M M M M
20 19119	
DATE 32/03/77 TII MEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI) :LOW 10 MID HI LOW 305 MID HI A=29 B=38 PP 10.12 MW (4M)08 (8M) (4M)23 (8M) (4M)23 (8M)	(DEG) (DEG) 354 344 352 339
15. 10N 1 NO.	
HS NO	2
(TENTHS HT (M) ONENTS RADIATI HARDSON (1/L)*10	H 1 2 2 3 3 2 5 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO.: (1/L)*10	HEIGHT (M)  1. 2. 4. 8. 16. 32.
CLD (TENTH CLD HT (M) EXPONENTS NET RADIAT RICHARDSON (1/L)*!	I .

LEAST SQUARES FITTED DATA

	"	••	••	••	••	••	••	"	"	••	••	•
SIGE (DEG)	5.5	5.1	4.7	4.4	4.1	3.8	3.6	R.I.	02	05	12	.00
SIGA (DEG)	7.9	6.8	5.8	2.0	4.3	3.6	3.3	BU*100	031	087	201	.330
TEMP (C)	.84	. 79	.68	.50	91.	31	52	DTH/02	.0384	.0334	.0234	1800.
WS (M/S)	6.97	7.69	8 * * 8	9.36	10.33	11.40	12.08	20/00	- 2789 -	- 1539 -	- 6480 -	.0219
		••	••	••	••	••	••			••	••	. !
SIGE (DEG)	4.6	4.6	4.5	4.4	4.3	4.2	4.2	RI	+00-	20	84	00.
SIGA (DEG)	9.2	8.5	7.7	7.1	6.5	5.9	9.6	BU*100	120	335	712	1.257
TEMP (C)	.21	+1.	10.	23	64	-1.16	-1.27	DTH/DZ	0523	0444	.0286	9010•
WS (W/S)	4.12	4.54	5.00	5.52	90.9	6.71	7.10	20/00	-1631 -	- 6680 -	- 9650.	6910.
		••	••	••	••	••	••			••	••	
SIGE (DEG)	10.5	8.1	6.3	4.8	3.7	5.9	5.5	R.I	04	20	72	00.
SIGA (DEG)	8.7	7.1	5.8	4.8	3.9	3.2	5.9	80*100	151	398	702	3.382
TEMP (C)		-1.15			Ť			DTH/DZ	0474	0386	0210	.0219
WS (W/S)	3.46	3.84	4.26	4.73	5.25	5.83	6.20	20/00	.1488	.0826	.0458	.0256
			••	••	••	••					••	
HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0		4.0	8.0	16.0	39.2*

	••	DATE 02	71/03/17	TIME		13:00:00		DATE 02	77/03/77	TIME 14:00:00	00:00		DATE 02	02/03/77	TIME 15:00:00	:00:	
			TEMP OFG	¥ .	1-1			•	TEMP DEG C	6-0				TEMP DEG (		3	• ••
		DEN P	DEM POINT DEG		-6.1			DEW PO	POINT DEG	-			DEW PO	POINT DEG C	2-9-2	2	
CLD (TENTHS)	. ::	0	10 MID	H		TOTL 1	0:00	;			TOTL 1	0:1	,		-	TOTL	:01
CLD HT (M)	••	-	N		Ħ			-	20 MID	2440 HI		••	LOW 12	20 MI	AI	6095	: 50
EXPONENTS		A=12	8	=d 1	•15			A=19	8=	P= .15		•• •	A=13	<b>œ</b>	5 P= .1	*	•• •
RICHARDSON NO.		(4M) -	18.07	N O	3(16M)	- 08		4M) -	10.33	02(16M)	1 02	• ••	( N4)	10.33 .00 (8M)	-01(16H)		.02 :
		39.1		(08	ERVED	0	::	_		COBSERVED		:-	61.		-		DATA!
(1/1)*10	••	- (M4)		-	M91) 50	-	9:		8	03 (16M)	-	15:		-	10.	-	.02:
USTAR	••	(4M) .5	5774 (8M)	. 564	(16M	•		4M) .52	75 (8M).	(H91) 6115	M) . 5015	. 2	(4M).55	62 (8M)		( 16M ) . 5	135:
		Q	T SH	EMP	SIGA	SIGE		Q.	-	EMP SIGA	SIGE		0,3	-	4		\$16E :
HEIGHT (M)	::	DEGI	_	-	DEG.	( DEC)	0):(	) EG) (	M/S) (	() (DE3)		::	DEG) (	(W/S) (	() (DEG)		EG):
1.				1.29						.89					2.32		
2.	••	348.		1.35	7.0			347.	-		1	••	359.		2.36 7	1.	••
.+	••	339.		1.35	5.8			37.	-							1.9	••
8.	••	347.		1.24	2.0	4.3:		45.	7.78 1	82 4.5	5 4.3		357.	8.33	2.26 6	6.3	4.5:
16.	••			06.	4.3				_							.3	4.3:
32.	••	34.	10.39	.51	2.6	3.9:		3.	-					16.		7.5	+.2:
48.	••	346.		• 33	4.1	3.		346.	9.82	49 3.	9	2:	355. 1	10.40		2.	4.1:
LEAST SQUARES		FITTED	DATA														
	••	SH	TEMP		SIGA	SIGE		NS	TEMP	SIGA	SIGE	••	NS	TEMP	P SIGA		S16E :
HEIGHT (M)		CM/S		-	DEG.)	(DEG)		(M/S)	3	( DEG )	(DEG)		(M/S)	3	(DEG)	-	: (DEC)
1.0		6.13		7	0.	5.1		5.65	-	7.2	5.9	••	6.05		8	*	. 6
2.0	••	6.30				4.8	••	6.25	-	6.3	5.4	••	69.9		7.	4.	. 8
4.0	••	7.54		S	6.	4.6	••	6.92		5.5	4.8	••	7.39		•	4.6	. 9
8.0	••	8.37	1.16		*	4.3	•• •	7.66		6.4	4.3	•• •	8.16	2.32		4.5	
10.01		7.6						***			200		0.6			?:	
32.0	••	10.3			0.4	3.0		9.38		3.7	3.0	•• •	9.90		2.5	7.6	
48.0	.	6.01		-	.3	3.8		66.6	1.40		3.3	.	10.55		-	•	-
		20/00	DTH/DZ	90	*100	RI		20/00	DTH/02	30*100	2		20/00	DTH/DZ	BU*100	RI	
4.0		.2616	0228	0	3	10		.2344	0126	015	10		.2454	.0058	900.	•00	. 0
8.0	••					03		1297	9600	037	02	••	.1355	.0050	110.	0.	. 00
16.0	••		0152	16		08	••		0035	045	02	••	.0749	.0033	.037	.00	. 00
39.5*	••			•		01		.0244	0510.	168.	00.		.0306	.0013	.067		
# CB	SER	CBSERVED DAT	L A														

CBSERVED CATA	A															
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSCN NO.		E 0	D2/03/77 T T WEATHER TEMP DEG C POINT DEG	TI T	TIME 16:00:00  R  C 3.0  C -4.6  II) 10  HI 6 TOTL  2440 HI 6095  T P= .18  MW/CM2  .02(16M) .0  .03 (16M) .5  .5296 (16M) .5	ME 16:00:00 : 3.0 -4.6 10 6 TOTL 10: 6 TOTL	0 0 0	DATE G2/03/77  WEATHER  TEMP DEG  VISIBILITY (MI  OW 2 MID 5  LOW 1220 MID  A=21 R=31  (4M) .01 (8M)  (39.192M) .06  (4M) .04 (8M)	COCCE OF COCC	8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1	00:00 :: 11L 10: 6095 :: 07 :: 04329: 11. 4329		DATE 02/03/77 T  TEMP DEG C  DEW PCINT DEG C VISIBILITY (MI) OW 0 MID 6 H  LOW MID 3  A=21 B=17  -2.90 M  (4M) .02 (8M) (4M) .05 (8M)	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	19:0 19:0 4 TO 4 TO 10:0 116:0 116:0 116:0	0:00 : 7520 : 7620 : 09 : 09 : 09 : 13 : 13 : 13 : 13 : 13 : 13 : 13 : 1
HEIGHT (M)	: WD:		WS (M/S)	TEMP (C.)	SIGA (DEG)	SIGE: WD (DEG):(DEG)	WD (DEG)	WS (M/S)	TEMP (C)	\$16A (DEG)	SIGE (DEG)	SIGE : WD (DEG):(DEG)	WS (W/S)	TEMP (C)	SIGA (DEG)	SIGE :
1. : 350. 6.56 4. : 340. 7.59 8. : 348. 8.56 16. : 336. 9.66 32. : 335. 10.85 48. : 348.		350. 340. 348. 335. 1 348.	6.56 7.59 8.56 9.66 10.85	2.45 2.45 2.45 2.45 2.45 2.45	23 3 2 2 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	3.6 3.8 2.9	345. 345. 345. 331. 344.	5.88 6.91 7.65 8.70 9.94	1.84 1.97 2.08 2.08 2.22 2.22 2.21 2.11	4 + 4 5 5 5 8 8 8 8 8 9 9 8 8 8 9 9 8 8 9 9 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	4 4 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	352. 343. 350. 337. 349.	5.50 6.36 7.18 8.07 9.32	1.23 1.38 1.51 1.55 1.66 1.66	0 4 4 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	44.6.0
PEIGHT (M)		WS (M/S)		TEMP (C) (	S IGA	S1GE :	WS (W/S)		TEMP (C)	SIGA (DEG)	SIGE (DEG)		WS (W/S)	TEMP (C)	SIGA (DEG)	SIGE :

	••	MS	TEMP	SIGA	SIGE	••	SM	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE
FEIGHT (M)	••	(8/8)	(0)	(990)	(DEG)	••	(M/S)	(0)	(DEG)	(DEG)	••	(M/S)	3	(DEG)	(DEG)
1.0		5.85	2.42	8.5	7.9		5.24	1.93	8.0	0.6		4.86	1.34	7.6	6.5
2.0	••	6.63	2.43	7.1	9.9	••	5.95	1.95	6.9	7.3	••	5.53	1.37	6.5	5.8
4.0	••	7.51	2.45	5.9	5.5	••	6.77	2.00	5.9	5.9	••	6.30	1.42	5.6	5.1
8.0	••	8.51	2.47	6.4	4.6	••	1.69	2.08	5.1	4.8	••	7.17	1.51	4.9	4.5
16.0	••	49.6	2.50	4.1	3.8	••	8.74	2.20	4.4	3.9	••	8.15	1.65	4.2	4.0
32.0	••	10.92	2.45	3.4	3.2	••	9.93	2.26	3.8	3.1	••	9.28	1.74	3.6	3.5
48.0	••	11.75	7.25	3.1	2.8	••	10.71	2.09	3.5	2.8	••	10.01	1.58	3.3	3.3
		Z0/N0	DT H / DZ	BU*100	8.1		20/00	DTH/02	BU*100			20/00	DTH/02	BU*100	1.8
4.0		.3132	.0170	-017	00.	!	.2895	.0307	.038	00.		.2721	.0341	.049	00.
8.0	••	+111.	.0143	•045	00.	••	.1645	.0263	101.	00.	••	.1548	.0292	.130	00.
16.0	••	1005	.0088	980.	00.	••	.0935	+210.	.208	00.		.0831	<b>7610</b>	.266	00.
39.2*	••	.0563	00000	000.	00.	••	.0479	.0038	+61.	00.		.0431	.0050	.295	.00

DATE 02/03/77	GE: WD WS TEMP SIGA SIGE: WD WS TEMP SIGA SIGE: NEG): (DEG): (DEG	63 : -1.43	3.5045 6.6 : 332. 2.73 - 4.3133 5.5 : 321. 3.44 -	.5: 328. 4.6114 5.0 4.3: 329. 3.8389 4.7	: 314. 6.45 .32 3.4 2.1: 320. 5.8934 3.9 1	.3: 52727 3.0 1.3: 336 3.5 3.8		GE : WS TEMP SIGA SIGE : WS TEMP SIGA	G): (M/S) (C) (DEG) (DEG): (M/S) (C) (DEG) (DEG):	7 : 3.0653 7.9 17.1 : 2.27 -1.31 6.9 7.	5 : 3.5648 6.7 11.0 : 2.75 -1.26 6.1 5	9 : 4.1338 5.7 7.0 : 3.33 -1.15 5.4 4	5 : 5-57 .08 4.1 2.9 : 4.8862	3 : 6.47 .36 3.5 1.9 : 5.9129 3.9 2	5 : 7.06 .25 3.1 1.4 : 6.6137 3.6 1	: 0U/02 0TH/02 8U*1	: .2066 .0555 .187 .00 :	: .1200 .0481 .480 .00 : .1295 .0538 .763	: .0697 .0333 .985 .00 : .0784 .0374 1.445
0.1 -4.3 15 2 TOTL 0 HI 762 CM2 CM2 5(16M) . SERVED DA	SIGA SIGE (DEG) (DEG)		0 N	4.7.4	3.4	3.0 2		16A S1G	(DEG) (DEG)	7.9 9.7	.6 7.	.6 5.	3.9 3.6	.3 2.	.0 2.	J*100 RI	083	00. 912.	.461 .00
ATE 02/03/77 TIME WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI) M 0 MID 6 HI OW MID 3666 =25 B=36 P= -2.90 MW/0 4M) .02 (8M) .03 39.192M) .27 (08 4M) .07 (8M) .13 4M) .3599 (8M).3394	WS TEMP (M/S) (C)		5.09 .86			11.1	FITTED CATA		(2)				86 1.06	_	11 1.15	01H/02	.0373	.0328	.0237
" " " " " " " " " " " " " " " " " " "	: WD		348.	: 346.		340.	S FITTE		: (M/S)	. 3.	: 4.36	5.07	6.86		: 8.71	30/NG :	: .2563	: .1490	: .0867
CLD (TENTHS) CLD HT (M) EXPCNENTS NET RADIATION RICHARDSCN NO. (1/L)*10	HEIGHT (M)	1.		8.	32.	.84	LEAST SQUARES		FEIGHT (M)	1.0	2.0	0.4	16.0	32.0	48.0		4.0	8.0	16.0

d	
-	
CA	
_	
0	
·	
2	
E S	
SE	
08	
0	

DATE 32/03/77 TI WEATHER TEMP DEG C VISIBILITY (WI) LOW O MID O HI
CATE 32/03/77 TI  WEATHER  TEMP DEG C  VISIBILITY (MI)  LOM D MID D HI  LOM D MID D HI  LOM D MID D HI  (4M) 0.06 (8M) 0.06 (8M) 0.00 (4M) 0.00 (8M) 0.00 (4M) 0.00 (6M) 0.00 (6
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSCN NO. (1/L)*10 USTAR 1. 2. 2. 4. 8. 16. 16.

LEAST SQUARES FITTED DATA

		••	••	••		••		!		••		••
SIGE (DEG)	.5	.8	1.3	2.1	3.3	5.4	7.1	Ia	.00	00.	.00	00.
SIGA (DEG)	7.4	8.3	4.6	10.6	11.9	13.5	14.4	RU*100	4.261	10.132	17.575	8.507
TEMP (C)	-5.52	-5.27	18.4-	-3.96	-2.63	-1.39	-2.06	DTH/DZ	_		.1170	_
(W/S)	1.26	1.49	1.77	2.10	2.48	2.94	3.25	20/00	1000	9650.	.0353	.0533
		••	••			••	••			••	••	••
SIGE (DEG)	4.9	4.3	3.7	3.2	2.7	5.4	2.2	R. I.	00.	00.	00.	00.
SIGA (DEG)	49.0	32.4	21.4	14.1	6.3	1.9	4.8	BU*100	2.747	5.170	7.200	2.104
TEMP (C)	-3.82	-3.65	-3.33	-2.74	-1.81	+6	-1.38	DTH/DZ	.1622	.1365	.0851	.0081
(N/S)	1.04	1.39	1.85	2.47	3.30	14.4	5.23	ZU/NO	.1813	11211	6080	.0687
			••			••				••	••	
SIGE (DEG)	3.4	3.6	3.7	3.8	3.9	4.1	4.2	۳. ا	00.	00.	00.	00.
S I G A (0 E G )	10.7	6.6	9.5	8.6	7.9	7.4	7.1	BU* 100	.485	1.102	2.014	2.229
TEMP (C)	-2.28	-2.21	-2.06	-1.80	-1.37	89	+6	DT H/ DZ	.0783	1890.	.0478	9510.
(R/S)	1.99	2.47	3.05	3.78	4.68	5.79	6.56	Z0/n0	.2188	.1354	.0838	.0383
		••	••	••	••	••				••	••	••
HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0		4.0	8.0	0.91	39.5*

00:00 17620 7620 166.87 11.0000	SIGE (DEG) 5 6 1.0 6 1.3 9 1.3
	5.5 11.6 5.5 1.6 5.0 5.0 6.9
D:00 : DATE 03/03/77 TIME 03:00 :	TEMP SIGA (C) (DEG) -7.43 -6.26 5.1 -3.82 1.0 -2.82 2.0 -2.42 5.0 -2.28 4.0
777 VIHER DEG DEG (MI 2 43 43 (BM) 3 (BM) 3	
3103/ WEMP VOINT SILITY MID MID MID MID MID MID MID MID MID MID	MS (M/S) 1.15 1.97 2.01 1.61 1.69
DATE 03/03/77 WEATHER TEMP DEG CEW POINT DEG VISIBILITY (MI OW 1 MID 2 LOW MID 2 LOW MID 2 (4M) 1.03*(8M)3 (4M) 42.4*(8M)* (4M) 034*(8M)*	MD DEG) 287. 274. 286. 286. 298.
	SIGE: WD (DEG): (DEG) : 287. : 274. .7: 286. 1.1: 285. 1.9: 298. 2.9: 323.
0:00 TL 6.1 1.44 1.006	
DO : DATE 03/03/77 TIME 02:00:00 :	TEMP SIGA (C) (DEG) -7.62 -7.24 10.5 -6.14 6.3 -4.48 4.2 -2.55 5.0 -2.19 5.5
WEATHER EMP DEG C -8. INT DEG C -10. ITY (MI) 25 MID HI 25 MID 3660 H) B= .83 P=7.25 MW/CM2 I7*(8M) 3.59(1.0) 17*(8M) 3.59(1.0) 17*(8M) 3.59(1.0) 18*(8M).0120 (1.0)	TEMP (C) (C) (T) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C
MEATHER MP DEG MP DEG ITY (MI DEG ITY (MI)))	- 6000
ME WE	MS (M/S) 1.13 1.85 3.06 2.77 2.00
DATE 03/03/77  WEATHER  TEMP DEG  DEW POINT DEG  VISIBILITY (MI LOW 2 MID  LOW 2 MID  A=14 B= .833  (4M) .17*(8M)  (39.192M) .05  (4M) 1.51*(8M)  (4M) 1.51*(8M)	
	SIGE: WD (DEG): (DEG) : 258. 2.0: 272. 2.8: 272. 3.1: 290. 3.5: 312.
: 00:00 7 7 TOTL 0 M) 1.0 6M) 1.0 6M).04	S16 C0E
777 TIME 01:00:00 ::  ATHER DEG C -7.1 : DEG C -9.7 : (MI) 20 ::  HI TOTL 1::  10 3660 HI ::  31 P= .40 ::  7.98 MW/CM2 : (BM) .84(16M) 1.08 ::  (BM) .84(16M) 1.08 ::  (BM) .4.18 (16M) 11.70 ::  (BM) .406 (16M) .0433 ::	SIGA (DEG) 6.1 5.0 6.0 6.5 8.2
TIME C C C C C C C C C C C C C C C C C C C	1 TEMP 6.40 6.40 6.40 6.40 6.40 6.40 6.40 6.40
CATE 03/03/77 TIME 01:  WEATHER  TEMP DEG C -7.1  DEW POINT DEG C -9.7  VISIBILITY (MI) 20  OW 1 MID HI  LOW 1 MID 36.0 HI  A= .11 B= .31 P= .40  -7.98 MW/CM2  (4M) .45 (8M) .84(16M  (39.192M) .05 (0BSERVE  (4M) 8.58 (8M)14.18 (166  (4M) .0483 (8M) .0406 (166)	(M/S) (M/S) 1.81 2.33 2.97 3.12
CATE 03/0  DEW POIN  VISIBILI  LOW 1 MI  LOW 2 MI  A= .11 B  (4M) .45  (4M) 8.58  (4M) 8.58	HEIGHT (M) : (DEG)  1 : 307. 4 : 293. 8 : 299. 16 : 296. 32 : 328.
CLD (TENTHS) :: CLD HT (M) :: EXPONENTS NET RADIATION :: RICHARDSCN NO.: (1/L)*10 ::	£
(TENTHS HT (M) GNENTS RACIATI HARDSCN (1/L)*10	H 2.2.16.8 4 8.3.2.
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATIO RICHARDSCN N (1/L)*10	F 16
CCCC CCCC EXP NET P	

LEAST SQUARES FITTED DATA

HEIGHT (M)	=	: WS		TEMP (C)	SIGA DEG)	SIGE (DEG)		MS (M/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		MS (M/S)	TEMP (C)	\$ 16A (DEG)	SIGE (DEG)	
1.0		•			9.4	1:1		1.28	-7.29	8.3			1.40	-6.02	2.4	6.	
4.0					5.3	1.3		1.50	-6.93	9.9	N.4.		1.56	-5.11	3.2	. ·	
8.0					7.5	2.1		2.04	-5.01	6.3	9-		1.65	-4.06	3.7	8 -	
32.0			3.63 -1.27		9.9	3.5		2.78	-1.38	200	2.0		1.85	-1.25	5.0	1.5	
		20/00 :	10	B.U	*100	8.1		20/00	DTH/02	80*100	II x		20/00	DTH/02	RU*100	1 %	!"
4.0	-	148	'	9	339	000		.0905	.3298	6.334	.00		.0296	.2847	6.818	00.	! "
8.0		6160. :	9 .2203	-:-	894	00.		.0528	.2737	15.361	00.	••	1910.	.2322	19.772	00.	••
16.0		+90. :		15.	408	00.	••	.0308	+191.	26.413	000		.0083	11211	38.412	00.	••
39.5*		: .072		2.	984	00.		.0652	9500.	5.126	000		1410.	6900.	11.903	00.	••
*	OBS	* OBSERVED DATA	ATA														

CBSERVED CATA															
	CATE	CATE 33/03/77 TIME 04:00:00	7 TIME	04:00	: 00:	DATE	03/03/77 TIME	7 TIME	05:00:00	: 00:	DATE	03/03/77	MIT TIM	TIME 06:00:33	: 00:
•		WEATHER	HER		••		WEATHER	HER				WEATHER	THER		
•		TEMP DEG C		4.6-	••		TEMP D	EG C -	10.0			TEMP (		6.6-	
	DEW	DEW POINT DEG	ں	-12.0		DEW	POINT D	- 0 93	-12.3		DEW	PCINT (		-12.6	
	VIS	VISTBILITY (MI)		55	••	VISI	: VISIBILITY (MI) 25	(MI) 2	2	•	VISI	VISIBILITY (*!)		25	
	*C7:	MID	H	4 TOTL	4	*LOW	MID	ΙΉ	5 10	2	S:LOW	MID	II	4 TOTL	. 4:
CLD HT (M) :	FOM:	MID	0	HI 7620	50	LOW	I'w	0	ī	0	. LOW	1	01	HI 7620	: 029
EXPONENTS :	P=	.07 B=08 P=	-d 80	18		A= .	13 8=	-87 P=	.20		A=	11 8= -	A=11 B=16 P=	.29	
NET RADIATION :		-9-	-6.89 MW/C	CM2	••		-9-	-6.39 MW/CM2	M2			-1.	198 MM/	CM2	
RICHARDSCN NO.:		(4M) 7.09 (8M)33.5	3M133.55	15(16M) ****	* ***	( M+)	. 29*(8	* 17 . (M	(16M)	: 94.6	( M )	.11	4. IM8	1 ( M91) C	1.62 :
		192M122.	10 (085	SERVED	DATA):	(36.1	92M1 .	89 (085	ERVED	DATA1:	(39.1	92M) 4	.03 (08	SERVED	SATA):
: 01*(7/1)	(44)	:***** (W91) ***** (W8) ***** (W5)	**** (WE	(H91)	*****	( M )	3.9*(8	M) 4.7*	(16M)	*****	(H4)	.75 (1	8M) 3.5	(M91) 5	25.55:
USTAR :	(M)	(4M).0021 (8M).0000 (16M).0000:	3M) . 0000	(H91) (	:0000:	(4H).	(4M).060* (8M).052 (16M).0050:	M).052	(16M)	.0000.	(44)	1109 (	(4w),1109 (8M),0754 (16M),0345:	(W91) 5	.0345:
	OM ::	SH	TEMP	SIGA	SIGE :		N.S	TEMP	SIGA	S16E :	C.X	S.M.	TEMP	SIGA	SIGE :
FEIGHT (M) :	:(DEG)	3		(DEC)	(DEG) (DEG):(DEG)		(M/S)	(3)	DEG )	(C) (DEG) (DEG):(DEG)	(DEC)	(M/S)	(M/S) (C) (DEG)	(DEC)	(DEG):
1:			8.32					-9.73					-11.27		
2. :	65.		'	11.2	••	105.	1.32	-9.73	11.5	••	118.	1.65	1.65 -11.26		
	.99		-8.14	8.8		.86	1.54	-9.56	10.7	••	110.	1.95	-11.13		••
. 8	81.		•	18.4	4.1:	1111	1.84	44.6-	8.5	3.8:	121.	2.35	-11.06		3.2:
16.	72.	96.	64.9-	14.5	:9.9	1111	2.97	-7.53	6.5	2.8:	107.	3.26	-10.85	6.9	3.0:
32.	332.		-4.93	37.2	9.6:	110.	1.88	-5.07	18.3	22.3:	130.	3.52	-8.18		3.3:
. 84	296.		-4.23	5.9	2.6:	81.		14.4-	16.4	6.6	150.		-5.83		2.1:

	••	SM			SIGE		SM	TEME		SIGE		MS	TEMP		SIGE
PEIGHT (M) .:		(8/8)	(3)	(050)	(DEC)		(M/S)	(3)	(DEG)	(DEC)	••	(M/S)	3	(056)	(DEC)
1.0		.85		11.3	9.9		1.22	-10.08	8.2	.5		1.33	-11.33	11.9	4.7
2.0		.75		11.9	6.2		1.40	-9.88	0.6	6.	••	1.63	-11.29	11.0	4.2
4.0	••	99.		12.5	5.9		1.60	-9.51	8.6	1.6	••	1.99	-11.22	10.2	3.8
8.0	••	.58	-7.54	13.1	9.6		1.84	-8.78	10.7	3.0	••	2.44	-11.02	6.6	3.4
16.0	••	.51		13.8	5.2		2.10	-7.49	11.6	5.5	••	56.2	-10.45	8.8	3.0
32.0	••	64.		14.5	5.0		2.41	-5.48	12.7	0.01	••	3.66	-8.56	8.1	2.7
48.0	••	.45		14.9	4.8		2.61	-4.25	13.4	14.2	••	4.13	-5.70	7.8	5.5
		20/00	0TH/02	BU* 100	R I		20/00	01H/02	80*100	RI		20/00	DTH/DZ	BU*100	۳ <u>.</u>
4.0		0277	.1470 19.	19.968	00.		.0731	.1932	4.476	00.	!	.1357	.0553	.834	00.
8.0	••	0122	.1356	464.46	00.		6140.	.1780	12.524	00.	••	.0831	.0744	2.985	.00
16.0		0054	.1127 4	02.486	00.	••	.0240	1741.	31.472	00.	••	.0509	.1125	12.307	.00
39.2*	••	*600.	.053726	40.916	00.		.0458	.0513	58-882	00	••	.0378	1569	61.719	00

DATA
_
9
-
-
_
ш
-
-
CHAR
11
v
ACE
L
•

10 44 44 88 88 88 88 88 88 88 88 88 88 88	6F : F6):
0::0 762 762 1.26	SIS
7.00 7.00 7.00 7.00 7.00 7.00 7.00 7.00	TEMP SIGA SIGE: -4.55 (DEG) (DEG): -4.73 8.54.90 7.25.06 6.1 4.8: -5.44 5.0 4.3: -5.62 5.4 3.5: -5.61 4.7 3.1:
ME 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20 24 4 21
MI) HI]	1EMP 1C) 14.55 14.93 15.06 15.06 15.62
03/77 WEATHER MP DEG NI DEG ITY (MI DEG MID OF CRIP) MID MID OF CRIP (MI OF CRIP) MID MID OF CRIP (MI OF CRIP) MID OF CRIP (MI OF C	
3 / O   I   I   I   I   I   I   I   I   I	(M. KS) 2.82 3.21 3.48 3.67
DATE 03/03/77 TIME 08:00:00 : DATE 03/03/77 TIME 09:00:00 : DATE 03/03/77 TIME 09:00:00 : DATE 03/03/77 TIME 09:00:00 : MEATHER TEMP DEG C -10.0 : TEMP DEG C -6.4 : TEMP DEG C -10.5 : USINILITY (MI) 60 : USINININININININININININININININININININ	60.00
0 > 30 H 4 6 4 4	MS TEMP SIGA SIGE: WD (M/S) (C) (DEG) (DEG): (DEG) -10.05 1.39 -10.18 10.6 : 129. 1.54 -10.14 10.6 : 120. 2.01 -10.15 9.4 4.1: 115. 4.22 -b.93 3.6 1.3: 1164.08 .8 .7: 139.
0 0 10 10 10 10 10 10 10 10 10 10 10 10	5.2: 4.1: 1.3:
000:00 762 762 762 763	3 2 3 4 3 8 8
DATE 03/03/77 TIME 08:00:00  WEATHER  TEMP DEG C -10.0  DEW POINT DEG C -10.4  VISIBILITY (MI) 60  LOW MID HI 10 TOTL  LOW MID HI 7620  A=68 B=-1.18 P= .36  (4M) .07 (8M) .33(16M) 1.5(16M) 2.47  (4M) .07 (8M) 2.47 (16M) 24.	116A 110.6 110.6 110.3 9.4 3.6
1 NE	P 055 114 114 115 115 08 08
MAN W H H H H H H H H H H H H H H H H H H	MS TEMP (C) (1.39 -10.05 1.54 -10.14 1.58 -10.23 4.22 -6.93 4.22 -6.93
03/77 WEATHER MP DEG NT DEG ITY (MI) ID MID B=-1.18 1.81 7.12 5 (8M) 3 (8M)	\$5 54 58 58 58 58 58 58
03/ PDIP PDIP PDIP PDIP PDIP PDIP PDIP PDI	504
ATE OF W 1 ST 1	SIGA SIGE: WD (DEG) (DEG):(DEG) 18.9 : 112. 16.7 : 105. 13.9 3.3: 119. 10.2 2.8: 121. 6.0 1.6: 150. 9.3 1.1: 173.
3 D	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
000 20 20 44 44 04 52 04 52 04 52	166 : 066) : 3.3 : 2.8 : 1.6 :
ME 07:00:00 : -10.3 : -13.1 30	16A S EG ( 18.9 16.7 13.9 10.2 6.0
# 07:0 -10.3 -13.1 30 TC # 38 CCM2 *8(16M) \$5 ERVER	S1G 10EG 113 10 6
H H H H H H H H H H H H H H H H H H H	144604-01
CATE 03/03/77 TI WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI) DW MID HI LOW MID HI COW MID A=63 P -6.91 MW (4M) .20 (8M) . (4M) 1.98 (8M) 4. (4M) 1.98 (8M) 4.	CC1 -11.4 -11.2 -10.9
/03/ WEA WEA MEA MID MID MID MID CO ( CM) 12 CO ( CM)	MS M/S1 1.53 1.53 1.80 2.17 2.91 4.53
18 18 18 18 18 18 18 18 18 18 18 18 18 1	3
CATE 03/03/77 TIME 07:00:00 :  WEATHER  TEMP DEG C -10.3 ::  DEW POINT DEG C -13.1 ::  VISIBILITY (MI) 30 ::  LOW MID HI 8 TOTL 8:1  LOW MID HI 76.20 ::  (4M) .20 (8M) .48(16M) 1.20 ::  (4M) 1.98 (8M) 4.96 (16M)14.29:  (4M) .0844 (8M).0668 (16M).0455:	(GEG) (M/S) 123. 1.53 114. 1.80 123. 2.17 111. 2.91 138. 4.53 148.
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHAR DSGN NO. (1/L)*10 USTAR	1. 2. 4. 8. 16. 32. 48.
(TENTHS HT (M) DNENTS RADIATI HAR DSCN (1/L)*10 USTAR	6HT 2.2.32.32.4.88.
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATIO RICHAR DSCN N (1/L)*10	1 E
1 2205	

LEAST SQUARES FITTED CATA

FEIGHT (M)		MS (#/S)	TEMP (C)	SIGA (DEG)	\$16E (DEG)		WS (M/S)	TENP (C)	SIGA (DEG)	S16E (DEG)		WS (M/S)	TEMP	S IGA (DEG)	\$16E (9EG)	
1.0		1.08	-11.78	24.5	13.6		.93	-10.22	28.2	75.7		2.73	-4.65	9.5	8.3	
2.0	••	14.1	-11.65	19.7	8.8		1.19	-10.22	17.6	33.4	••	2.93	-4.72	8.2	7.0	••
4.0	••	1.84	-11.39	15.9	5.7	••	1.53	-10.21	11.0	14.7	••	3.14	-4.83	7.2	6.6	••
8.0	••	2.39	-10.85	12.8	3.7	••	1.96	-10.10	6.9	6.5	••	3.37	-5.04	4.9	6.4	••
16.0	••	3.12	+1.6-	10.3	5.4	••	15.5	19.6-	4.3	5.9	••	3.61	-5.38	5.6	4.2	••
32.0		10.4	-7.32	8.3	1.6	••	3.22	-7.50	2.1	1.3	••	3.88	-5.71	2.0	3.5	••
48.0		4.75	99.4-	7.3	1.2		3.72	-3.89	2.0	80		40.4	-5.58	4.5	3.2	••
		70 / NO	01H/02	BU*100	٦.		20/na	DTH/02	BU*100	z.		20/00	DTH/DZ	80*100	8.1	!
4.0		.1643	.1433		00.		.1278	.0303	177.	00.		. 3737	0446	264	07	
8.0		1101.	.1480	691.9	00.	••	.0820	1650.	3.716	00.	••	. 9680.	0356	735	45	••
16.0	••	8690.	.1574	15.375	00.		.0526	+811.	17.894	00.	••	- 0212	7710	-1.271	-1.44	
39.2*		.0139	6990.	17.550	00.		0311	1881.	66.283	00.		.0182	9010.	3.969	00.	
*	OBSE	* OBSERVED DATA	A			!					!					!

OBSERVED CA	EATA														
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (1/L)*10 USTAR	z o	DEW VISION A= (4M) (4M)	ATHE DEG OF OR OF OR OF OR OF OR OF OF OR OF OT OF OR OT OT OF OR OF OR OF OR OF OR OT	TIME C - 1 C - 1 D 60 HI 1 MW/CM MW/CM (08SE -1.65	01L 762 1)-2.	10 10 10 10 10 10 10 10 10 10 10 10 10 1	DEW PO VISIBI LOW A= -10 (4M) (4M)-1.	3/03/77 WEATHER WEATHER TEMP DEG OINT DEG ILITY (M MID MID 25.40 25.40 25.40 25.40 25.40 25.40 25.40 25.40	TIME 11  C -0.  C -7.  I) 60  HI 10  MW/CM2  1085ERV  1085ERV  11.66 (1	101C 101C 101C 101C 101C 101C 101C 101C	1 0	DEW PG VISIBI LOW LOW A=14 (4M) (39.192 (4M)-1.	3/03/77 WEATHER TEMP DEG OINT DEG ILITY (MI MID 4 B= .13 32.66 .64 (8M)26 .64 (8M)26 .72 (8M)26	TIME 12:00  C +0.6  C -9.1  I) 60  HI TO TOTE  MW/CM2  MW/CM2  1.887(16M)-  2.47 (16M)  2.340 (16M)	00:00 0TL 10 7620 11-3.83 M1-2.52 M1-2.53
HEIGHT (M)		: WD :	HS T	TEMP SIG	A SIG	E ::	WD (DEG)	WS T (W/S) (	EMP SIG	A SIGE ) (DEG)		WD ( )	WS TE	EMP SIGA	SIGE (DEG)
1. 2. 4.		138.		1.71			134.	19:	= 2			MN	21		215
8. 16. 32. 48.		140. 125. 127. 147.	3.20	-2.36 11.0 -2.64 8.1 -2.89 7.1 -3.06 6.9	0-1-6	9426	137. 121. 121. 142.	3.15	1.53 8 1.68 8	05.70		137. 122. 124. 143.	2.87	26 12. 29 11. 57 10. 75 10.	6 10.1 5 9.6 6 10.8
LEAST SQUARES HEIGHT (M) :	RES	FITTED DATA WS (M/S)	DATA TEMP	P S16A	\$16 (0EG	w -	SM (M/S)	TEM	P SIGA	SIGE (DEG)		WS (M/S)	TEMP	SIGA (DEG)	\$16E
1.0	••	2.57	1 -1.88	16			4.	3	11.			2.14			
2.0		2.92	2 -2.05	14.1	0.9		2.67	7 42	11.0	4.9		2.28	. 4.	15.8	7.1
8.0	••	3.11		10		••	0	8	6			2.59			
16.0	••••	3.31	19-2-1	8 1		••••	2.5	-1.2	* œ			2.76	' '	11.7	
48.0		3.65		. 9			. 6	-				3.05	•		
		20/00	DT H/ DZ	90	R I		20/00	DTH/02	80*100	R.		20/00	DIHIDZ	80*100	12
4.0 8.0 16.0 39.2*		.0325	0440	299	08		.0662	0526	368 -1.063 -2.163	11		.0273	0471 0389 0226 0012	457 -1.333 -2.734 793	-3.83
	-										-				!

\* OBSERVED DATA

7.6 : 1.08 1.89 38.2 22.1 : .96 2.26 7.8 8.5 1.18 1.84 34.5 22.1 : 1.00 2.23 5.6 9.4 : 1.28 1.76 31.1 22.2 : 1.04 2.18 3.5 10.4 : 1.40 1.61 28.1 22.3 : 1.08 2.08 1.60 9.9 12.9 : 1.66 1.08 22.8 22.4 : 1.13 1.91 9.9 12.9 : 1.66 1.08 22.8 22.4 : 1.18 1.67 8.9 13.7 : 1.74 1.09 21.5 22.5 : 1.20 1.56 1.67 8.9 13.7 : 1.74 1.09 21.5 22.5 : 1.20 1.56 1.56 4.4212 : .0365028799238 : .0141015301280231 -2.699 -2.90 : .00380072 -5.8 8.9 1.462 : .01080120 -4.734 -11.99 : .00380072 -5.5 5.5 1.50 1.56 1.56 1.56 1.56 1.56 1.56 1.56 1.56	6 1.59 30.3 7.6 : 1.08 1.89 0 1.53 27.8 8.5 : 1.18 1.84 4 1.43 25.6 9.4 : 1.28 1.76 9 1.24 23.5 10.4 : 1.40 1.61 5 .92 21.6 11.6 : 1.52 1.36 3 .50 19.9 12.9 : 1.66 1.08 4 .40 18.9 13.7 : 1.74 1.09	EMP SIGA SIGE: C) (DEG) (DEG):	WS TEMP	SIGA SIGE (DEG) (DEG)
11.53 27.8 8.5 1.118 1.84 34.5 22.1 1.00 2.23 63.9 13 11.43 25.6 9.4 1.128 1.76 31.1 22.2 1.04 2.18 62.8 15 11.24 23.5 10.4 1.40 1.51 28.1 22.3 1.08 2.08 61.8 18 11.24 23.5 10.4 1.40 1.52 1.36 25.3 22.4 1.18 1.91 60.7 22 11.6 11.6 1.52 1.36 25.3 22.4 1.18 1.65 59.7 25 11.6 18.9 13.7 1.74 1.09 21.5 22.5 1.10 1.56 59.1 28 11.40 18.9 13.7 1.74 1.09 21.5 22.5 1.10 0.74/DZ 8U#100 R  -0.38844212 1.0365028799238 1.01410153801 10.306 -2.891 -4.62 1.01080120 -4.734 -11.99 1.00380072 -5.150 -3.	4 1.43 25.6 9.4 : 1.28 1.76 9 1.24 23.5 10.4 : 1.40 1.61 5 .92 21.6 11.6 : 1.52 1.36 3 .50 19.9 12.9 : 1.66 1.08 4 .40 18.9 13.7 : 1.74 1.09	38.2	2.26	11
2.39 1.24 23.5 10.4 : 1.40 1.61 28.1 22.3 : 1.08 2.08 61.8 18 2.39 1.24 23.5 10.4 : 1.40 1.61 28.1 22.3 : 1.08 2.08 61.8 18 2.55 .92 21.6 11.6 : 1.52 1.36 25.3 22.4 : 1.13 1.91 60.7 22 2.55 .92 21.6 11.6 : 1.52 1.36 25.3 22.4 : 1.18 1.67 59.7 25 2.84 .40 18.9 13.7 : 1.74 1.09 21.5 22.5 : 1.20 1.56 59.1 28 DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100 R .0492038844212 : .0365028799238 : .01410153801 02630328 -1.30985 : .01990231 -2.699 -2.90 : .00730126 -2.435 01400206 -2.891 -4.62 : .01080120 -4.734 -11.99 : .00380072 -5.150 -3.	9 1.24 23.5 10.4 : 1.40 1.61 5 .92 21.6 11.6 : 1.52 1.36 3 .50 19.9 12.9 : 1.66 1.08 4 .40 18.9 13.7 : 1.74 1.09	34.5 22.	2.23	6
2.55 .92 21.6 11.6 : 1.52 1.36 25.3 22.4 : 1.13 1.91 60.7 22 2.73 .50 19.9 12.9 : 1.66 1.08 22.8 22.4 : 1.18 1.67 59.7 25 2.84 .40 18.9 12.9 : 1.74 1.09 21.5 22.5 : 1.20 1.56 59.1 28  DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100 R  .0492038844212 : .0365028799238 : .01410153801 02630328 -1.30985 : .01990231 -2.699 -2.90 : .00730126 -2.435 01400206 -2.891 -4.62 : .01080120 -4.734 -11.99 : .00380072 -5.150 -3.	5 .92 21.6 11.6 : 1.52 1.36 3 .50 19.9 12.9 : 1.66 1.08 4 .40 18.9 13.7 : 1.74 1.09	31.1 22.	2.08	81 8
2.73 .50 19.9 12.9 : 1.66 1.08 22.8 22.4 : 1.18 1.67 59.7 25 2.84 .40 18.9 13.7 : 1.74 1.09 21.5 22.5 : 1.20 1.56 59.1 28  DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100 R  .0492038844212 : .0365028799238 : .01410153801  .02630328 -1.30985 : .01990231 -2.699 -2.90 : .00730126 -2.435  .01400206 -2.891 -4.62 : .01080120 -4.734 -11.99 : .00380072 -5.150 -3.	3 .50 19.9 12.9 : 1.66 1.08 4 .40 18.9 13.7 : 1.74 1.09	25.3 22.	16.1	7 22
2.84 .40 18.9 13.7 : 1.74 1.09 21.5 22.5 : 1.20 1.56 59.1  DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100  .0492038844212 : .0365028799238 : .01410153801  .02630328 -1.30985 : .01990231 -2.699 -2.90 : .00730126 -2.435  .01400206 -2.891 -4.62 : .01080120 -4.734 -11.99 : .00380072 -5.150 -	4 .40 18.9 13.7 : 1.74 1.09	22.8 22.	16.1	22 7
DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100  .0492038844212 : .0365028799238 : .01410153801  .02630328 -1.30985 : .01990231 -2.699 -2.90 : .00730126 -2.435  .01400206 -2.891 -4.62 : .01080120 -4.734 -11.99 : .00380072 -5.150 -		•77 0•77		
.0492038844212 : .0365028799238 : .01410153801 .02630328 -1.30985 : .01990231 -2.699 -2.90 : .00730126 -2.435 .01400206 -2.891 -4.62 : .01080120 -4.734 -11.99 : .00380072 -5.150 -	70/HIQ 70/NG : 1X 001*08 70/HIQ	21.5 22.	1.56	.87
.02630328 -1.30985 : .01990231 -2.699 -2.90 : .00730126 -2.435 .01400206 -2.891 -4.62 : .01080120 -4.734 -11.99 : .00380072 -5.150 -	038844212 : .03650287	21.5 22. 8U*100 RI	0 1.56 DTH/DZ	0 R1
	0328 -1.30985 : .01990231 -	21.5 22. BU*100 RI	0 1.56 DTH/DZ	*100 R
- 0.01.0 - 0.00.0 0.00.0 0.00.0 0.00.0 0.00.0 0.00.0	- 0206 - 2 891 - 4.62 : 0108 - 0120 -	8U*100 BU*100	01+702 01+702 0153	
	- 0710 - 8010 : 78.4- 168.7- 9070 -	21.5 8U*103 992 -2.699 -2	DTH/DZ -0153	10 100

		DEM PO	WEATHER TEMP DEG C DEW POINT DEG C	2.7 C -7.9	-6		DEW	POI	E O O E	00-	2.3			TEMP DE DEW POINT DE	WEATHER TEMP DEG POINT DEG	00-	1.7	1.1
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (1/L)*10 USTAR		.LOW 1525 LOW 1525 A =11 B: (4M)-1.38 (4M)-3.67 (4M)-3.67	MID 610.54 (8M) (8M) (8M) (8M)	1 660 660 8 7 3 4 1 0 3 8 5 E 7 1 1 1 1 0 5	+	.620 -10.1 DATA) -6.63	LOW A= - (4M) (4M) (4M) (4M)	~ .	MID 2.93 (8M) (8M)	11 3660 P= 77 1088E		620 620 1.41 DATA) 93		* 5.55	. H .8 # 88	3 HI 3660 39 P= 1 MW/CM 1 28.27( # (DBSE) 1 *****	5 TO HI .07 (16H)	7620 7620 53.18 DATA) 1.0000
HEIGHT (M)	- =	MD DEG) (	WS T	EMP SIGA		SIGE :	WD (DEG)	Ξ	SS	TEMP S13,	4-	SIGE (DEG)	1 1	MD DEG)	WS 1	(C)	SIGA (DEG)	SIGE (DEG)
-1 %		42.			α		356.			1.90				.68	44	1.31	10.7	
; <b>;</b> ;				0		•	345	٠			3.0	,		70.	19.	1.55		
16.				+ 10		1.0:	343.			28	9.5	7.5		59.	.60	1.54	: ;	10.01
32. 48.		26.	1.68	1.52 14	14.8 118.0 1	11.7:	344.		.83	1.24	7.7	8.5		58.	.60	1.35	10.2	6.2
LEAST SQUARES	RES	FITTED DAT	DATA															
HEIGHT (M)		WS (M/S)	TEMP (C)	P SIGA (DEG)	8	1GE :	3	HS H/S)	TEMP (C)	SIGA (DEG)	-	SIGE DEG)		WS (W/S)	TEN (C)	4	SIGA DEG1	SIGE (DEG)
1.0		1.45			4	8	1	.33	1.85	16.1		7:		.48			8.7	:
2.0		1.51			ņ	6.	1	.42	1.84	14.2		•		.50			***	1.5
000	• ••	1.64	16.1	20.1	. 6	10	7 -	19.	1.75	10.9		2.4		.55	1.48		7.7	2.6
16.0	••	1.70			11.	. 0	1	.72	1.63	9.6				.58			7.3	3.4
32.0		1.77	1.45	17.2	13.			. 83	1.43	4.8		7.5		.60	*:-		0.7	4.
0 1	. .	20/00	DTH/O		- 1		20/00	1	DTH/D2	80*100			.   -	20/00	DTH/D	1	BU*100	RI I
4.0	-	.0206	0164	378	0	05 :	.03	0324	.0055	136		.04	!	.0080	.0171	3.	3.527	00.
8.0	••		0139		3	33 :	.0173	1	.0048	417	•	.12		.0042	.0138	-	0.367	00.
16.0	•• •	0075	0089	-2.822	-1.2	20 :	00.	- 2600	.0034	-1.037	1-1-	50.		.0022	0013	-19.	-15	5.03

	••	••	••	••	10:	••	••	••	. 53 :	DATAL	3.02:	: 0660.	-	36 .	(DEG):		••	••	:0:	4.3:	5.9:	7.8:		. as							••						
21:00:00					TOTL						-	_		SIGE	0		2	1						SIGE	(DEG)	-	2.	2.1	3	*	9		~	.00	0.	00.	•
		4.1-	-5.3		0	IH O	*1.	MW/CM2	.28(16M)	DBSERVED	12 (16M			SIGA	(DEC)			7.7				7.		SIGA	DEG.)	7.8	1.6	1.4	1.1	6.0		9.9	8U*100	170	462	883	000
TIME	ER	ပ 9	3	_	0	4	8	21 MM/		-	-	7	1	TEMP	3	.62	.76	.86	.92	1.03	.92	.76		ENP	()						0	3		•	•	•	
03/03/17	WEATHER		0	_	MID	MID	8= .	-2.5	0		•	-	-	MS	M/S)		2.80	1.27	1.80	20	4.35	31	812 812	TE	2			.80		•	1.00	. 73	OTH/02	.0315	.0260	.0151	.0000
DATE 03/		1	DEM POINT	ISI	0		+00-		4M) .1	19	-	4M).1861	1				5.	5.	3.			4.	5	S#	(M/S)	2.69	2.96	3.26	3.59	3.95	4.35	4.60	20 / NO	1047	92 50	0317	0025
DA :			0:	>	-	. LOW	= V :	••	4) :	: (3	-	-		3	: ( DEG )			35	••	: 350.	35		10										٥	•	•	•	:
00:					10	1620		· ·	****	DATA	***** (W91)	(16M) .0000			(DEC)				.3	0	1.4	-:		SIGE	DEG)	.5		6.	1.3			3.3	RI	. 00.	00.	00.	00.
TIME 20:00:00		0.1	-8-1	52	10 10	HI 7	P=10	MW/CM2	(H9	COBSERVED			i		(DEC)	22	05 4.3	3	2	22 48.7	15 63	3 68			(DEG) (	2.4	4.7	4.6	18.5	36.6	72.2	107.5	8U*100	0.041	7.865	99.030	7.311
03/03/77 T	WEATHER	MP DEG C	DEG	TY (MI	HID OIN	MID	_	-2.93 M	( 8 M)	.79	* ( W 8 )	-	1	MS TEMP	_		.7805			7	.53 1.	-		TEMP	(3)	01	60.	.27	09.	01.1		.92	DTH/02	1		.0450 9	
DATE 03/		TE		ISI	0	LOW	A= .98		(44)12.1	(39,192M)	*****(W5)	(4M) .0000			0 66)		41.	29.	261.	234.	261.	298.		S.M.	(M/S)	.85	.79	.74	69.	+9.	09.	.58	20/00	0168	0079	0037	9010.
••	••	••	••	••	1:01	••	••	••		. ( 4	**	:00	-	••	9:19		••	••		.0	=	:0.					••	••	••	••	••	••			••	••	••
19:00:00					TOT	7620			139.8	D DATA		(16M).0000		S	( DEG		_	2	2 1	*		7		SIGE	(DEG)	1.7	1.3	6.			4.	.3	RI	00.	00.	00.	00.
TIME		v		05 (	-	2440 H	P=20	MW/CM2	0	LOBSERVED	*	0	1	PS	1 (DEG)	.27		2	16		1.20 .3	15		SIGA	(DEG)	3.7	3.3	5.9	2.5	7.7	1.9	-	80*100	-	168.94	140.543	000.
03/03/77	WEATHER	EMP DEG	POINT DEC	VISIBILITY (MI)	m	2	8= 42	-4.33	( 8M )	00	(8M)		1		(M/S) (C)	'	49.	.71	.62	1 85.		.43 1	DATA	TEMP	(0)			.52			-	.95	OTH/D2	.0785	.0646		• 0000
DATE 03		1	DEM PO	VISIBI		LOW	A=19		(4M) 3.06	-	**** (M5)	(4M) .0003			:( 066)		189.	198.	167.	62.	129.	102.	SQUARES FITTED DATA	N.S.	(M/S)	.86	.74	.65	.56	64.	.42	.39	20/00	0303	0132	15000-	.0075
••	••	••	••	••	:	••	••	 Z	0		•	••	-	••			••	••	••	••	••	••	RES				••	••	••	••	••				••	••	••
					CLD (TENTHS)	CLO HT (M)	EXPONENTS	NET RADIATION	RICHARDSON NO		(1/11*10	USTAR			HEIGHT (M)	1.	2.	4.	. 8	16.	32.	48.	LEAST SQUA		HEIGHT (M)	1.0	2.0	4.0	8.0	0.91	32.0	48.0		4.0	8.0	16.0	39.2*

	:	DATE 03	/03/77	TIME 22	:00:00 :
	:		WEATH		:
	:		EMP DE		
	:			G C -6.	
	:		LITY (		
CLD (TENTHS)					TOTL LO:
CLD HT (M)		LOM	MID		
EXPONENTS		A=26		07 P= .2	
NET RADIATION				3 MW/CM2	:
RICHARDSON NO					M) .10:
11.0.1410				7 (OBSERV	
(1/L)*10				1) .11 (1	
USTAR	:	(4M).24	35 (OM	1.2270 (1	5M1.2109:
		WD	WS	TEMP SIG	A SIGE :
HEIGHT (M)				(C) (DEG	
	- 60				
1.	:			21	
2.	:	309.	2.70		.5 :
4.			3.75		.6 :
8.					.2 4.3:
16.	:		4.79		.8 3.3:
32.			5.16	20 4	.4 3.5:
48.	:	303.	5.35	28 3	.7 3.7:
LEAST SQUAR	ES	FITTED	DATA		
			7.	MD CICA	CICE .
UE 1 CUT (M)	:	WS	TE!		
HEIGHT (M)	:	(M/S)	()	i (DEGI	(DEGI:
1.0	:	2.59	1	2 11.0	4.6 :
2.0	:	2.98			4.4 :
4.0	:	3.43			4.2 :
8.0	:	3.94			4.0 :
16.0		4.53			3.8 :
32.0	:	5.21			3.6 :
48.0	:	5.66			3.5 :
	:	DU/DZ	DTH/D	Z BU*100	RI :
4.0	:	.1601	.0143		.00 :
8.0	:	.0920	.0122	.181	.00 :
16.0	:	.0529	.0080	.357	.00 :
39.2*	:	.0119	.0050	1.002	.00 :

ARMY DUGWAY PROVING GROUND UTAH
TURBULENCE MEASUREMENTS ON A FORTY-EIGHT METER TOWER IN DESERT --ETC(U)
OCT 77 A W WALDRON AD-A049 036 NL UNCLASSIFIED 2 OF 5 AD 4049036



	-																
		DATE 03	03/03/77	TIME	23:00:00	: 00	DATE	04/03/77	TI ME	00:00	00:	. DA	TE 34	103/17	TIME 01	:00:	: 00
	••		WFATHER	0		••		WFATHE	-K SW-			••		WFATHER	~		••
		-	TEMP DEG	J	+	••		0	0	-		••	7.	TEMP DEG	c -1.	4	••
		DE PO	POINT DEG	C -3.4	4	••	3	DOLLAT DEG		2.8			DEW PO				•
		-	TTV (MI)	, -		•		TRILLTY (M	7 11				212	>	-		•
CIC STENITUES	. :	C			TOT		7			TOT	1.					TOT	
כרי בי בייויי	٠.		-		1	2	٠,	4			1	-	יים ואים	1220 MID	1		2
								111111									1
EXPLNENTS		A=11	3= -	Cl. =d +1	12	• •	A= -6	**	v	81.			700- =		47° = 4	*	
NEI KAUIAIILN			66.00	SEC.		(		5	-					1001	ZUZZ		
RICHAR DSCN NO		. (M)	.18 (8M)	.48(16	SM)	6	( tw)	8				-	2	( SW)	11111	( "	: 11
	••	(39.192	92M )****	(OBSERV	VED D.	a	(39.1		_		DATA)		19	10	CBSERV	VED DA	DATA1:
(1/1)*10	••	(4M) 1.	1.64 (8M)	4.93	16M)	8	( WT)	8) 46	74.	(164)	. 17	:	-	( 8w)	.35 (1	- (M9	. 38:
IICTAP	•		No.	0812 (1	6MI	0570	(WY)	8	21.76	LIANI	1881		-	( RW)	1385 (1	4411	998
USI AN	. !	. 1		. 0013				100	1 4 7 .	0 1	3!	. !	11.1		1700		1
	•	5	T VM	TEMP STG	S A:	1 GF .	5		MP	IGA	SIGE		CS	1	FWP SIG	GA ST	
PETGHT (M)	-		-	9	, -	3	9	(M/S)		EG1	DE C		(9	51	1 (DE	-	1
	-		!		-		. 1			1		1			-	-	1
1.	••		-	1.17		••			-1.31					•	1.02		
2.	••	.04	2.28 -	1 8			331.	88						2.01 -1	00	6.1	
4.	••		99.			••	320.	4.67	- 92					35	.71	6.1	
	•					4.3:	328	4.92			4.4			74	. 2		5.4.
			2 20	33	•		310	10		•	•		make the				
130				1.55	0 0		910	01.0	66.1-	7.6				70.6	200		
96.		• 17			•		913.	2.40						1	10.	0.	.0.4
48.		25.	3.64	JC		3.6:	327.	7.39		. 1	2.1	. 3	57.	4.27	5	2.	5.4:
LEAST SQUARES	ES	FITTED DATA	DATA														
	! "	S	TEMP	P S164	10	16F .	3	H	51	GA	12		S.X	TEMP			GF :
PEIGHT (M)	••	(M/S)		106	9	9	S/W)	) (	1 (06	0 19	DEGI		(N/S)	(3)	(DEG)	105	: (9)
1.0		2.13	76 1	-	5	. 4.	3.4	-1-	7.	6 1	0.7	!	1.69			6	
2.0	••	2.36	06	6	4	. 6.	3.5	95 -1.00	. 9	9		••	1.99			5.	
4.0	••	2.62		8.8	4	4.5 :	4.4	·	5.	1	0.0		2.34	18	10.0	5.	
9.0	••	2.91		80	+	. 1.	5.6	-	5.	0		••	2.76			5.	. 5
16.0	••	3.23	154	7	3	. 1.	5.1	5	4.	3			3.25			5.	. 4
32.0	••	3.59		1	3	. 4.	6.4		3.	8			3.83	'		5.	3
48.0	••	3.81		9	3	. 2.	16.9	-	3.	2			4.21	-2		5.	2 .
	-				-			1	-	-							-
1 15 CAN	-	20/00	DTH/02	80*100	~	-	20/00	1 DTH/02	80*1	-	1 2		20/na	DTH/DZ	BU*100	10	"
4.0		9160.	.0416	.349	•	: 00	.1823	640.	.14	43	00.		.1287	.0288	.302	.00	. 0
8.0	••	.0509	.034€	.939	•	: 00	.1030	036	.32	•	00.		9510	1710.	.518	0.	
16.0	••	.0282	.0204	1.797		: 00	.0582	8600.	.27	1	00.	••		1900		*	. 4
39.2*	••	6100	0157	4	-17.	: 40	99	052	-6.70	8-133	4			0563 -	-18.029-	443.1	: 9.
	!											-				-	-

OBSERVED DATA

OBSERVED DATA	_														
	: DATE	: DATE 04/03/77 TIM	TIME	E 02:00:00	••	DATE	DATE 04/03/77 TIME 03:00:00	TIME	03:00		STAC	: DATE 04/02/77	MIT TT	TIME 04:00:30	: 00:0
		WEATHER	HER		••		WEATHER	ER				WEATHER	THER		•
		TEMP DEG C	DEG C	-2.1	••		TEMP DE	. 0 5	0.4-	••		TEMP	DEG C	9.4-	•
	: 0E,	DEM POINT DEG	DEG C	-2.8		DEW P	DINT DE	. 29	-4.3	•	DEW	DEW POINT DEG C	DEG C	-5.6	
	: VIS	SIBILITY	(MI)	01	•	VISTE	ILLITY (	MI) LIM	5	••	VIS	PILITY	(11)	01	•
	10 N	:LOM 10 MID	H	TOT	MU7:01 7	MO	OW 2 MID HI	Ŧ	TOT	7 2:	LOW	S MID	H	TOTL	. 6 .
CLC HT (M)	MOT :	1220 MID	0	H	•	I MOJ	1220 MID		H	•	LOW	1220 MID	01	IH	•
EXPONENTS	. A= -	28 B=38 P=	38 P=	•25	••		33 8=43 P=	43 P=	.22			.11 8=04 P=	04 P=	.22	•
NET RADIATION		-9-	-6.56 MW/C	/CM2	••		-5.4	5.44 MW/CM2	42	•		-2	-2.51 MW/CM2	CM2	•
RICHARDSON NO.:	( 4M)	.03	•	5(16M)	. 05 :	( MT)	.02 (8M	190.	[16M)	: 60.	(M)	.08		0(16M)	.30 :
	: (39,	.192M1	0	(OBSERVED DATA):	SATA):	(39.19	12412	5 (085	FRVED	SATA):	(39.	192M1 -		SERVED	DATA):
(1/1)*10	1 (4M)	(4M) .10 (MH)	•	(16M)	:90.	( M )	.08 (8M	1.14	(1641)	.12:	( W +)	1 94.		M91) L	:40.1 (M91) 79.
USTAR	(4H)	1.2866 (8M)	27	8 (164)	.3030:	(4M)	78 (16M).3030: (4M).3457 (8M).3177 (16M).3117: (4M).1411 (8M).	1.3177	(16M)	.3117:	(4M)	1411 (		.1152 (164).1062	.1062:
	QM :	S.M.	TEMP	SIGA	SIGE :	Q.		TEMP	SIGA	SIGE :	Q.		TEMP	SIGA	SIGE :
HEIGHT (M)	: (DEC)	(M/S)	3	(DEG) (DEG):(DEG)	(DEC):(	DEG.)	(M/S)	(030) (0)	1930	(DEG): (DEG)	(DEG)	(N/S)	3	(DEG)	(C) (DEG) (DEG):
1.			-1.63					-1.64					-2.17		
2.	344			6.9	••	349.		-1.57	6.2	••	345.	2.05	-2.14		••
	333	. 4.22	-1.24	6.2	••	338.		-1.25	5.7	••	334.	2.42	-1.78		••
	341.			5.4		347.		+1	4.7	4.4:		2.65	-1.25		4.8:
16.	. 330.	61.5	-1.33	4.1	3.9:	335.	6.37	-1.48	3.6	3.6:	334.	3.01	-2.14	0.9	4.7:
32.	330		-1.19	3.5		337.		-1.04	5.9	2.8:		3.60	-1.66		4.6:
.84	343	7.81		5.9		351.			2.1	2.0:		4.38		5.8	4.5:

		MS	TEME		SIGE		SM	TEME		SIGE	••	MS	TEM		SIGE	••
HEIGHT (M)		(M/S)	(3)	(DEG)	(090)		(M/S)	5	(DEC)	(DEG)	••	(M/S)	(3)	(DEC)	(DEG)	••
1.0		2.96	-1.49	8.8	10.6		3.61	-1.47	8.6	11.3		1.73		0.0	5.2	! "
2.0	••	3.51		7.3	8.1	••	4.19	-1.43	6.9	8.4	••	2.01	-1.97	8.3	5.1	••
4.0	••	4.16			6.2		4.87	-1.37	5.5	6.2	••	2.35		7.7	4.9	••
8.0	••	46.4			4.8	••	5.65	-1.25	4.3	4.6	••	2.14		7.1	4.8	**
16.0	••	5.86			3.7		6.56	-1.10	3.5	3.4	••	3.19		9.9	4.7	••
32.0	••	6.95	-1.23		2.8	••	7.62	-1.10	2.8	2.5	••	3.72		6.1	4.6	••
48.0	••	7.68			5.4		8.32	-1.52	5.4	2.1	••	4.07		5.8	4.5	••
		20/00	DTH/D2	8U*100	R.I		20/00	DTH/02	BU*100	71		20/00	DTH/DZ	80*100	18	
4.0			.0435		00.		.2434	.0403	860.	00.		.1205	.0332		00.	! "
8.0	••	.1413	.0326	.308	00.		.1413	.0323	.233	00.	••	.0703	.0268	.828	00.	**
16.0	••		1010.		00.		.0821	.0162	.347	00.	••	.0410	0410.		00.	••
39.5*	••		0354	,	32.58	••	-0531	0198	-1.696	-8-1	••	.0488	0160	'	14.40	••

\* OBSERVED DATA

		10 3 150	04/03/11	TIME	00:00:50	: 00:	DATE D	4/03/17	IMF 06	:00:00:	7Q :	16	7	TIME 07	07:03:00
	••		WEATHER	8		•		WEATHER					WEATHER		
	••	_	TEMP DEG	U	2	•		TEMP DEG	2 -6.2			11		.5- 3	1
	••	DE M PO	POINT DEG	u	9.9-	••		DINT DEG	-6.			3	DEG		4
	••	VISIBL	VISIBILITY (MI)	_		••	VI SIR	SIBILITY (MI)	_			IS	-	01 (	
CLD (TENTHS	_	:104 5	S MID	IH.	TOT	. 5:	LOW 8	MID	1	TOTL 8	3:10	01 MG	0	IH	TOTE
CLD HT (M)	••		52		H	•	LCW 1	220 MID	I				MID	I	
EX PONENTS	••	A=17	œ	2 0=	.24	•	3	9 R=			¥	=20	_	P= .2	0
NET RADIATION	. NO			M		•		-5.	MW/CM2		••		-2.93	MM/CM2	
RICHARDSON NO	. ON			.13(	( W91	.15	_	01 (8	.03(16M		-	0. (14)	1 (8M)	.03(16M)	
	••	1.	•	LUBSE	(ED	SATA):	61.	•	LOBSERVE	DAT	-	192	_	CBSERV	0
(1/L)*10 USTAR		(4M).18	.28 (8M) 1892 (8M)	.1703	164)	.1770:	(4M) (4M).3	.04 (8M) 741 (8M).	.07 (16M) 3589 (16M)	M) .06		4M) .0	4 (8M) 2 (8M).	3631 (16)	64) .37 64).3481
		9	WS T	TEMP SI	G A	1 -	GX	S TE	W S	516		CA	S TE	S	5
HEIGHT (M)		_	W/S)	0)	63	-	0		(050)	1930)	::0	_	M/S) (C	1 (066	OE (
			'	-2.07				-2	.41				-2	.37	
2.	••	343.		-2.00	6.5	••	344.	45 -2	.35 6	4	. 3	3.	.53 -2		
	••		_	-1.62	2.9	•	334.	2- 12	.15 5	9	: 33	2.	.34 -2	13	
8	••			1.13	5.7	4.1:	342.	73 -2	.03 5	5.	••	:	- 06.	86.	9.
16.	••		4.17 -	1.85	4.1	3.3:	330.	74 -2	.29 3	4	. 3		- 81.	53	.2
32.	••		4.82 -	-1.48	5.1	3.1:	330.	03 -2	.18 2	2			1.82 -2.	14	6.
48.	"		5.59	10	3.7	2.7:	344.	8.74	-	.7 1.5	: 3	3.	8.73 -99	06	. 1
LEAST SQU	SQUARES	FITTED DAT	DATA							9					
		N.S.	TEMP	IP SIGA		-	S#	TEMP	SIGA	SIGE		MS	TEMP	SIGA	516
FEIGHT (M)		(M/S)	3	5	-	: (930	S/W)	(3)	EG		••	(M/S)	3	EG	41
1.0		2.14		7.		5.4 :	0	-2.	4.4			3.96	2.2	8.1	
2.0	••	2.53	7			5.5 :	4.4	2 -2.29	1.4	13.9		4.54	-2.25	7.1	0.6
4.0	••	2.99		. 9		1.1	-	1 -2.				5.22	-2.23	1.9	6.7
8.0	••	3.54		5.		. 0.	5.	2 -2.				2.00	-2.18	5.3	5.1
16.0	••	4.18	-1.47	. 4		3.5	.8	5 -2.			••	6.88	-2.12	4.6	3.8
32.0	••	46.4		. 4.3		3.0 :	7.9	4 -2.		5.4		7.90	-2.17	4.0	2.9
48.0	••	5.44	-2.17	*		. 1.	9 !	5 -2.	. 1	. 1		8.56	5	3.1	2.4
	•	20700	DTH/02	B.		: 12		0	901*08	8.1		20700	DTH/D7	RIJ#100	12
4.0		.1673	.0460			90		.025	.056	00.		0150	.0225	.048	.30
8.0	••	8860.	.0352	959.	•	: 00	1641.	.0200	.132	00.		.1383	5310.	6111	. 33
16.0	••	.0584	.0137	•		. 00	.0840	600.	+61.	00.		+610.	5010°	.205	00.
39.2*	•	1076								,					

<	1
<	Į
4	١
C	5
u	Ú
>	>
0	۲
u	1
Ü	,
SAC	1

	••		MEATHER	2		•		MCATHER		
	••	-		0 0	-4.2			TEMP DEG	C -2.3	
	••	DEM PO	POINT DEG	2 9	-5.5		DEW P	POINT DEG		
	••	VISIBIL	-	115	10	•		ILITY (MI	1 2	
LD (TENTHS)	:	8 10	01W 8	ī	TOT	TL 3:		2 MID 4	1 IH	TOTL 7
CLD HT (M)	••	-	1220 MID		Ιı	••	LOW 12	4ID	45 HI	9609
XPONENTS	••	A=17	B=1	=d 91	- 115	•	91 = 7	B=1	0 P= .13	
NET RADIATION	••		1.81	1 MW/C	5			11.23	MW/CM2	
	:	( 4M)	-		.02(16M)	: 60.	(4M) -	10	03(16M)	
	••	(39.192M)	41) .52	-	OBSERVED	0	_		CBSERVED	0
(1/1)*10	••	(4M) .(	-		.04 (16M		- (M4)		04 (16M)	-
USTAR	••	.3		.3	59 (16M)	.3	( 4M)		4574	4.
		Q.X	N.S.	TEMP	SIGA	S16F :	5	WS TE	TEMP SIGA	SIG
HEIGHT (M)	ä	_	-	3	(DEG)		(DEG)	_	(056)	
1.				-1.89	6				16.	
2.	••	353.	4.86	16.1-	1 6.7		356.		93 6.	
*	••			-1.74	.9	••	345.		90 6.3	
	••			-1.44						
16.	••			-2.1			340.			
32.	••		7.42	-1.82	2 4.1	3.7:		7.62 -1		3
48.	••		81.1		4.0		352.	7.87	4.	
LEAST SQUARES	ES	FITTED DATA	DATA							
	••	SH	TE	EMP	SIGA	\$ 16E :				SIGE
PEIGHT (M)		(W/S)	3	-	(050)	(DEC) :	(M/S)	00	(DEG)	(DEG)
1.0		4.44	-1.79	6	7.4	6.6	4.8	587	7.7	5.2
2.0	••	4.92	-	0	9.9	5.9	5.31		6.9	6.4
4.0	••	5.45		0	5.9	5.3	5.81		6.2	4.5
8.0	••	6.04		2	5.2	4.7 :	6.36		5.5	4.2
16.0	••	69.9		4	4.7	4.2 :	96.9		2.0	3.9
32.0	••	14.7		9	4.2	3.8 :	7.62		4.5	3.6
48.0	••	7.87	-1.86	9	3.9	3.5 :	9.04	+1-1- +	4.2	3.5
		20 / NO	DT H / DZ		80*100	. 1.8	ZQ/NQ	DTH/92	BU*100	RI
4.0		.1863	.0066		.013	. 00	.1752	0110	019	01
8.0	••	.1032	.0070		.045	. 00.	.0959	0071	041	03
16.0	••	.0571	.0080		991.	: 00.	.0525	9000.	-015	00.
+0 00		1000			***					

	•• •	03TF 34	34/03/77	TIME	: 00:00:01	DATE 34	04/03/77	TIME 11:0	11:00:00	DATE	04/03/77	TIME	: 00:00:21
	•• ••	2464	TEMP DEG	0	17.50	•	THEK		286,600	1	TEMP DEG	2.	
	••	DEW PO	POINT DEG	.4-	7	3		2-6- 3		3	POINT DEG		3
		VISI	-	30		151	IW.	30		=	BILITY (M	1) 50	
CE THE CITY	:	3	1220 MID 3	7745 HI	ייי יייי איייי	10W 12	220 MID	2745 HI	יים אונו. ביים אונו		1220 MID	11	
	• ••	i	B=10	D= 0	•	-	.03	P= 4		5	0	0 P= .1	
NET PADIATION	7		26	MWICH	••		44.24	MW/CM2			98	MW/CM2	
PICHARDSCN NO		(+x)	.03 (8M)		: 91 (	-	04 (84)	12(16M)		- (M+)	04 (BM)	11116	M)23 :
	••	119	_	(03SF	0	-	29	W	0	(39.19	2M) 49	COBSERVED	ED DATAL:
(1/1)*10	••		1	+1				.17		- (M4)	.12 (8M)	1) 91-	(16M) 16:
USTAR	••	(44).507	1 (8M)	.493	M).4827:	(4M).57	(8M).	5565 (16M)	11.5491:	(4M).6	1.6373 (8M)	.6185 (1	(16M).6099:
		G.X	WS T	TEMP SIGE	SIGE :	M	WS TE	MP SISA	S16E :	Q.	-	EMP SIG	A SIGE :
HEIGHT (M)		1 (550):	M/S1	-	(080)	0EG) (	S) (C	( DEG)	(DEG):	5	-	CDEG	
1				.18			1	.31				2.23	
2.	••	353.	5.79	7.			-		•	*		2	.3
	••	344.	.56					7	••	355.		1.74 9.	. 6.
	••	351.	.29	21 5.2				7	4.6	3.	01.6		.0 4.5:
16.	••				2 3.4:			.40 6.2	4	351.		1.22 8	8.5 4.4:
32.	••			6				.06 5.7		~			.8 4.6:
48.	••	351.		71 4.0			- 15.6			3.			
LEAST SQUARES	SES	FITTED DAT	DATA										
	••	¥	TEMP	P 516A	\$ 16E :	MS	TEMP	SIGA	\$ 3918	SM	TEMP	P SIGA	\$16E :
HE19HT (M)	••	(N/S)	(3)	(930)	(DEG) :	(M/S)	-	(DEG)	(DEG)	(N/S)			-
1.0		5.49	.13	9.1	5.1 :	6.21	1.17	0.6	4.2 :	6.9	2.05		4.5 :
2.0	••	5.93		7	. 8.4	6.13	-	8.2	4.3	7.55		10.	4.5 :
6.9	••	6.51		9	. 4.4	7.30		7.5	. 4.4	8.1	-	6	4.5
8.0	••	7.09			4.2 :	7.92	.77	6.8	4.5	8.84	-	9.3	4.5
0	••	-		4	3.9 :	8.59		6.2	4.6	9.6	-	0.6	4.5
32.0	••	8.42	•	4	3.6 :	9.31	03	5.7	4.7	10.36	11.	8.6	4.5
48.0	••		69	3	3.5 :	9.77		5.4	4.7	10.8	•	8.4	4.5
		20/00	01H/02	901*66	: 12	20/00	DTH/D7	BU*100	я :	20/00	DTH/D2	RU*100	 
4.0		0	0335	045	03 :	.1978	0452	350	. 20	.2156		045	02 :
8.0	**		0268	123	05 :	.1073	0386		06	.1167		121	05 :
16.0	••		0135	209	: 91		0234	167	25 :	.0631	0262	261	23 :
39.5*	••	960	.3388	.673	: 00.	125	0012		07	.0644		408	: 64
*	DASERVER	DAT	4										

4
-
4
L
0
w
>
Œ
SE
S
Œ
-

			1													
5.0:	2.9	1.97	10.4	13.		5.3	1.81	10.99	:	4.3:	6.8	1.26	11.08	=		48
4.6:	4.9	2.21	10.15	359.		2.0	2.08	10.71	357.	4.3:	6.5	1.56	10.92	357.	•	32.
4.73	7.7	2.46	9.43	359.	4.3:	5.7	2.41	10.05	358.	4.4:	6.7	1.92	90.01	357.	•	16.
4.9	7.9	5.64	8.55	12.		1.9	2.74	9.33	::	4.9:	6.9	5.25	9.27	.01		8
	8.4	2.79	1.64	4.		7.5	3.00	8.35	*	•	1.6	2.51	8.32	:	•	4
	8.5	2.94	6.71	13.	••	8.2	3.32	7.35	13.	••	8.6	2.86	7.36	10.		2
		3.04			•		3.52			•		3.04				-
SIGE (DEG)	SIGA (DEG)	(C)	WS (M/S)	ND DEG )	DEG):(	TEMP SIGA SIGE : NO (C) (DEG) (DEG) (DEG)	TEMP (C)	SM (M/S)		SIGA SIGE: WD (DFG) (DEG):(DEG)	SIGA	CC)	(M/S)	: (DEG)		HETSHT (M)
.5617	M911 1	(8M)06 (16M)07 (8M).5661 (16M).5617	: (4M)05 (8M) : (4M) .5821 (8M).	££	.6231:	(164)	M)14	(4M)11 (8M)14 (16M)14: (4M).6444 (8M).6289 (16M).6231:		(8M)14 (16M)14: (8M).6287 (16M).6251:	(164)	4).6287		(4M) 10	*10	(1/L)*10 USTAR
DATAI	SERVED	54 (08	.92M)	(39.1	DATAL	ERVED	80 (088	9241		DATA):	ERVED	12 (085	(39.192M)-3.12	1.68)		ALCHARDSON NO.
	.M2	77 MW/CM2	21.		. :	M2	05 MW/C	46.05 MW/CM2			/CM2	47.17 MW/C	47.		ATION	NET RADIATION
	*1.	-00 b=	8 01	A=	•	.13	.03 P=	16 8=	A=	•	.13	-07 P=	08 8=07 P=	: A=(	S	EXPONENTS.
	Ŧ	0	1525 MID	LOW	•	IH	•	1525 MIC	LOW	••	Ŧ	0	1220 MID	*07 :	. E	CL5 HT C
1 2	TOT		2 MID		M07:2	TOT	Ŧ	2 MID	*C	1 2:1	TOT	H	2 MID	:LOM 2		CLD (TENTHS)
	0		BILITY	VISI	••	0	MII 5	BILITY (	VIST	•		_	VISIBILITY (MI	VISTE	•	
	-7.0		2				J 53		ne a	•	-7.3	U	DEM POINT DEG	DE #		
			DOTNT D	DEW	••	9.9-		POINT OF	7 30	•			TEMP DEG C		•	
	4.4		DOINT D	DEW	•••	3.9	2 9	POINT OF	3	••						
	4:4	2002	TEMP DE	DEW		3.9	15 A D	* NEW POINT DES C 3	3				MEATHER			

HEIGHT (M)		WS (W/S)	TEMP (C)	\$ S16A	SIGE (DEG)		WS (M/S)	TENP	SIGA (DEG)	SIGE (DEG)		WS (W/S)	TENP	SIGA (DEG)	SIGE (DEG)
1.0	-	6.9	2.87		5.5		6.96	1	0.0	6.3	"	6.25	2.96	9.5	4.8
2.0	••	7.55		8.1	5.3		7.59	3.27	8.0	4.3	••	6.89	2.92	8.9	4.8
4.0	••	8.24		7.7	5.0		8.28		7.2	4.4	••	7.59	2.85	8.3	4.8
8.0	••	9.04		7.3	4.8	••	9.03		6.5	4.5	••	8.36	2.71	7.7	4.8
16.0	••	9.90		6.9	4.5	••	9.85		5.8	4.6	••	9.21	2.47	7.2	4.8
32.0		10.8	1 1.41	9.9	4.3		10.74		5.5	4.7	••	10.14	2.14	6.7	4.8
48.0	••	11.42		4.9	4.2		11.30		6.4	4.8	••	10.73	2.00	4.9	4.8
	•	20/00	DU/92 DTH/02	901 +00	1 2		ZQ/NQ	DTH/02	80+100	a I		20/00	DTH/DZ	BU* 100	2
4.0	**	.2487	0571	048	03		.2396 -	0559	046	03		-2450 -	.0247	024	-0
8.0	••	1361.	0484	135	09		.1306	0471	131	05	••	- 1349 -	0211	690	04
16.0	••	.0744	0309	288	20	••	.0712	0294	276	21	••	-0743 -	0137	148	09
39.2*	••	00100	0087	397	29		. 0175	6900-	320	04	••	- 1810-	0050	250	- 27

MEATHER TEMP DEG C VISIBILITY (MI) HI LOW MID MID HID HID HID HID HID HID HID HID HID H

d
-
4
2
0
w
>
œ
SE
S
90
0

TEMP DEG C  TEMP DEG C  VISIBILITY (MI)  CLD (TENTHS) :LOW MID HID  EXPONENTS : A=13 B= .15 P:  RET RADIATION : (4M)10 (8M)  RICHARDSON NO.: (4M)28 (8M)  USTAR : (4M)28 (8M)  USTAR : (4M)28 (8M)  USTAR : (4M)28 (8M)	DEG C 12.2 : DEG C -5.0 : DEG C	JTL 7 L 6095 : 1 - 54 : 0 DATA): 41 - 37:	DEW POI VISIBIL OW M LOW A=11	MP DEG C NT DEG C ITY (MI) 6 ID HI 7	13.9		TEMP DEG C DEW POINT DEG C	MP DEG C	13.9	• •
DEW POINT  VISIBILITY  LOW MID  LOW MID  A=13 B=  N: (4M)10 ( 39.192M)-4  (4M)28 ( (4M)28	G C -5.0 MI) 60 HI 7 TO HI 8 TO HI 10 TO	JTL 7 L 6095 : 1 54 : 0 DATA): 41 37:	DEW POIN VISIBILI DW MI LOW MI A=11 B (44)12	TY (MI) 6	-5.6		JEW POINT	0000		
. VISIBILITY LOW MID LOW MID LOW (AM) 13 B= (4M) 10 (AM) 10 (AM) 4733 (AM) AMS WD WS (DEG) (M/S)	MI) 60 HI 7 TO HI 7 TO MW/CM2 I)27(16M) IO (085 ERVED I)37 (16M)	JTL 7 L 6095 : 154 : 0 DATA): 4137:	VI SIBILI OW MI LOW A=11 B (44)12	TY (MI) 6		•	TI TREET	DEG C	1-9-	•
: LOW MID : LOW MID : A =13 B = N : (4M)10 ( : (39.192M)-4 : (4M)28 ( : (4M)28	HI 7 TO HI 15 P= .12 MW/CM2 1)27(16M) 10 (085 RVED 1)37 (16M)	17L 7 L 6095 : 1 54 : 0 DATAl: 41 37:	OW MI LOW A=11 B (44)12	1 HI 7	0	•	1310161	Y (HI) 6	0	•
. LOW A=13 B= N (4M)10 (7.192M)-4 (4M)28 (7.192M)-4 (4M) 4733 (7.192M)-4733 (7.192M)-	HI 15 P= .12 MW/CM2 1)27(16M) 10 (085 ERVED 1)37 (16M) 1)37 (16M)	6095 : 154 : 0 DATA1: 1137:	A=11 B		7 TOTL 7	-	HIGH H	IH	10 TOT 10:	:01
N: (4M)10 ( : (39.192M)-4 : (4M)28 ( : (4M) -4733 ( : WD WS : (DEG) (M/S)	MW/CM2 MW/CM2 1)27(16M) 10 (085ERVED 1)37 (16M) 1)37 (16M)	:54 : DATA):	A=11 B	OIW	109 Ін	••	*	MID	909 IH	: \$609
(4M)10 ((4M)28 (4M)28 (4M)4733 (DEG) (M/S)	MW/CM2 1) - 27(16M) 10 (085ERVED 1) - 37 (16M) 11 - 4633 (16M)	:  54 :   DATA  :  37 :	(44)12	=d 12. =1	.11	••	:12 B=	A=12 B= .22 P=	60.	••
(4M)10 (8M (39.192M)-4.1 (4M)28 (8M (4M).4733 (8M WD WS	1)27(16M) 0 (0BSERVED 1)37 (16M	DATA): 0 DATA): 11 - 37:	(44)12	D/WM	MZ			D/MW	42	••
(39.192M)-4.1 (4M)28 (8M (4M).4733 (8M WD WS (DEG) (M/S)	.0 (OBSERVED	) DATA1: 4137: 41.4659:		(8M)34	(16M) -		IM)29	(8M)85	(16M)-1.	: 19
: (4M)28 (8M) : (4M),4733 (8M) : WD WS : (DEG) (M/S)	1)37 (16M	11.4659:	12741-461	-1.46 (OBS	ERVED DA		19.192M1	34 (085	ERVED DA	TA1:
: (4M),4733 (8M : WD WS :(DEG) (M/S)	11.4683 (16M	11.4659:	(4M)35	74- (M8) 5	(16M)		18 - (MI	(8M)-1.14	(16M)-	:11:
: WD WS :(DEG) (M/S)			(4M).4611	(8M).4561	(16M).		141.3496	(4M).3496 (8M).3489 (16M).3427	(164).3	1457:
:(DEG) (M/S)		SIGE :			SIGA SI	GE : N			SIGA SI	GE :
	(C) (DEG)	(DEG):(DEG)	DEG) (M/S)	(S) (C) (DEG)	DEG) (1	(DEG): (DEG)	EG) (M/S)	) (C) (DEG)	DEG) (E	(DEG):
1. : 1	13.04			14.16		•				
5.18					11.9	: 11				-66.65-
. : 154. 5.97					11.2	: 15				••
: 157. 6.59					10.1					8.0:
: 149. 7.08					8.7					8.6:
. : 147. 7.47	11.33 8.7	1 5.5:	141. 7.	7.03 12.46	8.3	7.2: 15	154. 4.69	9 13.52	12.8	9.5:
7.58					0.6					12.4:

4
-
4
DA
60
W
-
-
-
FI
S
ш
œ
4
-
ā
SQUA
-
AS
E
_

	••	SM		SIGA	SIGE	••	MS	TEMP	SIGA	SIGE	••	MS	TENS	SIGA	SIGE
HEIGHT (M)		(M/S)	3	-	(DEG)	••	(H/S)	3	(DEG)	(DEG)	••	(M/S)	3		(DEG)
1.0		4.98		13.1	3.5		4.86	13.84	12.7	3.4		3.58		19.3	4.8
2.0	••	5.41		12.0	3.9	••	5.24	13.75	11.8	4.0	••	3.79	14.54	17.8	9.6
4.0	••	5.86		10.9	4.3		5.65	13.58	6.01	4.6	••	4.03		16.4	6.5
8.0	••	6.36		10.0	4.8		60.9	13.26	10.1	5.3	••	4.27		15.1	1.6
16.0	••	06.9		9.1	5.3	••	6.57	12.76	4.6	6.2	••	4.53		14.0	8.9
32.0	••	7.48		8.4	5.8		7.08	12.23	8.7	7.1	••	4.81		12.9	10.4
48.0	••	7.85	11.17	7.9	6.2	••	7.40	12.33	8.3	7.8	••	4.98		12.3	11.4
		20/00	DTH/DZ	BU*100	1 8		20/00	DTH/02	BU*100	R.	-	20/00	DTH/DZ	BU*100	- 4
4.0		1651.	0703	112	05		-1421 -	9010.	121	02	••	.0796	0547	184	05
8.0	••	.0863	0584	317	13	••	- 9910.	1850.	343	17	••	.0422	0447	534	+2
16.0	••	.0468	0345	638	54		-0413 -	.0332	675	19	••	.0224	0245	-1.044	83
39.5*	••	6900.	0056	527	33		- 9600.	0037	392	39	••	.0137	6100	479	68

	:	DATE	07					IM	E	15	:0	0:0	00	:
	:					THI				_				:
	:			EMI						5.				:
	:	DEM					diam'r.			5.	0			:
CLD ATENTUCA	:	VISI	n r			-		11	60		T 0	T.		
CLD (TENTHS)	:	.Ow		MIC				666			1000			0:
CLD HT (M) EXPONENTS	:	LOW A=		0-		ID				.1		004	,,	:
NET RADIATION	:	A=	13					W/			L			:
RICHARDSON NO.		(4M)											70	:
KICHAKDSON NO.		(39.1		-							0000			
(1/L)*10	:	(44)												
USTAR	:	(4M).												
031 MK	·				'	011	•		<u>'</u>		04			
	:	WD		WS	;		FEN	P	S	IG	Δ	SI	GE	:
HEIGHT (M)		DEGI	1	M/5			CI		(0)				EG	
					-									
1.	:					1	15.	80						:
2.	:	170.		3.9	95	1	5.	57		12	.4			:
4.		159.		4 . 5				18			.1			:
8.	:	162.		4.9	8			68			. 3		5.	
16.	:	155.		5.2			14.	74		8	.9		6.	2:
32.		155.		5.5			4.	43		7	. 3		6.	
48.	:	161.		5.6	9	1	4.	21		7	. 1		7.	2:
					-									
LEAST SQUARE	5	FITTE	0	DAT										
	:	W	S			TEN	P		SI	GA		SI	GE	:
FEIGHT (M)	:	(M/				(C)			DE		-	DE	GI	:
1.0	:	3.	31	1	.5	. 5	3	1	4.	4		4.	0	:
2.0	:	4.	11	1	. 5	. 46	,	L	2.	7		4.	4	:
4.0	:	4.	44	1	.5	.33	3	1	1.	2		4.	9	:
8.0	:	4.	200	1000		.08			9.	-		5.	4	:
16.0	:	5.	17	1	4	. 68	3	- 1	8.	7		6.	0	:
32.0	:	5.		1	4	.24	•		7.0	5		6.	7	:
48.0	:	5.	83	1	4	. 29	)		7.	L		7.	1	:
	:	סטוס:		וט	H	וטי		BU:	# L (	70		RI		:
4.0	:	.113	1	0	5	+0	11/3		1 40	,		0	2	•
8.0	:	.061							-	32.1		2		
16.0	:	.032		0								7		:
39.2*	:	.009		0								7		

OBSERVED DATA	A																
		ATE 0	DATE 07/03/77 TIM	7 7	IME	E 16:00:00		: DATE	77/03/77		TIME 17:00:00		DATE	: DATE 07/03/77		TIME 18:00:00	. 00:0
			MEATHER	HER			••		WEATHER	HER				WEA	WEATHER		
	••		TEMP DEG	EG C	17	5.8	••		TEMP D	EG C	16.0			TEMP	DEG C	13.5	••
		DEW P	DEM POINT DEG	DEG C	•	9:9	••	DEW	DEW POINT DEG	EG C	-6.7		DE	DEW POINT DEG C	DEG C	-4.8	•
		VISTR	VISIBILITY (MI	CHI	09		••	VIS	VISIBILITY (MI	? (Iw)	5		311	VISIBILITY (MI)	(IW)	20	•
CLD (TENTHS)	*CO4	3	MID 10	H 0	_	TOTL	M07:01	LOW	MID	IH OI OIW	TOT	LL 10:	10:COW	MID	IH OI OIW		TOT. 10.
CLD HT (M)		107	MID	0	3660 HI	Ŧ	••	LOW	LOW MID 366	D 3660 HI	IH C		MOT :	: LOW MID 3660	10 36	3660 HI	
EXPONENTS	¥	0 == 1	A=08 B=	-08 P=		.13	••	A= -	-21 8= -	-22 P=	.20		- =V	54 B=-	1.04 P	37	
NET RADIATION			10.	10.11 MW/	W/CM2	2	••		-0-	-0.69 MW/CM2	.M2			-3	-3.97 MM	MW/CM2	
RICHARDSON NO.: (4M)05 (8M)		- ( W+	8) 50	- (W	.13(	3(16M) -	. 53 :	(W+)	.04 (8M)	90. (MI	(M91)60.	: 61.		1 500	8M) .	.12(16M) .23	. 23
		39.15	32M1-3.	05 (	( OBSEF	RVED D	ATA1:	(39.	192M)	17 (08)	( OBSERVED	DATA):	(39	192MP	0) 94.	BSERVE	DATAL
(1/1)*10		- (M)	(4M)14 (8M)1	-	61.	(16M)	19 (164)20:	(4M)	(4M) .14 (8M)	M) .26	.26 (16M)	: ++:	(4M)	(4M) .24 (8M)	. (M8	4911 05	. 62:
USTAR		4H1.	(4N).3496 (8M).343	IM) .3	431	(16M).	3422:	( M+)	.1934 (8M).1809 (16M).1630:	M) . 1805	(16M)	1.1630	M +)	(4M).2049 (8M).2000 (16M).1948	8M).20	491) 00	11.1948:
	3	9	N.S.	TEMP		SIGAS	SIGE: WD	9	MS	TEMP	SIGA	SIGE	GM	HS	TEMP	TEMP SIGA	SIGE :
PEIGHT (M)	::	:(DEG)	2	3		( DEC)	(DEG): (DEG)	(DEC)	(M/S)	(3)	(DEC)	(C) (DEG) (DEG):(DEG)	(DEG	(H/S)	3	(DEG)	(DEG):
1.				16.05	05					15.02					12.26	9	
2.		124.	3.91	15.	86	8.5	••	141.	2.38	15.17	7.4		145.		12.52	2 6.6	
+			4.57	15.	78		••		2.91	15.18							
	-	117.	5.05	15.40	40	6.3	4.5:	135.	3.48	14.99	5.3	3.9		10.4			
16.	-	100.	5.32	15.	99	5.8	4.9:	130.	4.20	15.42	5.5	3.0:	131.			1 2.2	1.6:
32.	-	. 80	5.79	15.	54	5.8	4.9:	135.	4.90	15.48	4.4	2.6:					
48.		.18.	5.93	14.	16	6.9	5.2:	147.	5.43	15.41	3.5	2.7					
	-			-											-		-

בנשט הפשורה יויר השוש	2															
	••	MS			SIGE		WS	TEMP	SIGA	SIGE		S#	TEMP	SIGA	SIGE	
PEIGHT (M)	••	(M/S)	3	(DEG)	(DEG)	••	(M/S)	(3)	(DEG)	(DEG)	••	(M/S)	9	(DEC)	(DEG)	
1.0		3.74			3.9		2.02	15.05	8.7	5.9		1.88	12.32	10.1	24.3	1
2.0	••	4.08	15.89	7.7	4.1	••	2.42	15.07	7.5	5.0	••	2.43	12.43	6.9	11.9	
4.0	••	4.45			4.3	••	2.89	15.12	6.9	4.3	••	3.15	12.65	4.7	5.8	
8.0	••	4.86			4.5	••	3.45	15.20	5.6	3.7	••	4.07	13.07	3.3	2.8	
16.0	••	5.30	15.47		4.8	••	4.13	15.34	4.8	3.2	••	5.27	13.81	2.2	1.4	
32.0	••	5.78			2.0	••	46.4	15.47	4.2	2.7	••	6.82	14.91	1.5		
48.0	••	60.9			5.5	••	5.48	15.42	3.8	5.5	••	7.93	15.51	1.2	*.	
		20/00	DT H/ D2	BU*100	RI		Z0/N0	DTH/DZ	001*08	RI		20/00	OT H/02	BU* 100	8.1	1
4.0		.1294	0228	062	02		.1730	.0314	.205	00.		.2734	.1164	.645	00.	•
8.0	••	.0706	.07060194	179	07	••	.1034	.0279	.509	00.	••	.1769	.1065	1.408	00.	
16.0	••	.0385	0126	390	29	••	8190.	.0210	1.070	00.	••	.1145	6980.	2.736	00.	
39.5*	••	.0087	6900	-1.048	-1.53	••	.0331	. 0056	11111	00.	••	.0563	.0425	4.057	00.	
						1										

\* OBSERVED DATA

HS) :: CO N NO :: CO NO :: CO N NO :: CO NO :: CO N NO :: CO NO :: CO N NO :: CO NO :: CO N NO :: CO NO :: CO N NO :: CO	11.00 M M M M M M M M M M M M M M M M M M	MP DEG C  NT DEG C  ITY (MI) 5  ID 9 HI  MID 3660  17 (MI) 3660  18 - 56 P=  -7.60 MV/C  -	10.8 -2.6 50 10.8 -2.6 50 H T T T T T T T T T T T T T T T T T T T	00 :: 10:L0 :- 95 :: 4TA) :: 8.73 :: 2778 ::	DEW POINT LOW A= .08	WEATHER TEMP DEG C POINT DEG C IBILITY (MI MID	11 ME	20:00:00 ::	DATE 07/03 WE TEMP DEW POINT	ATHER DEG DEG	TIME 21:00:00 C 8.6 C -5.2	00:0
(TENTHS) :LO HT (M) :LO NENTS : A RADIATION : HARDSON ND :: ( LI/L)*10 : ( JSTAR : ( LI/L)*10 :	19.00 9.23 19.24 11.11	M M M M M M M M M M M M M M M M M M M	50 1 1 101 660 HI 66 W/CM2 W/CM2 W/CM2 16M) 380 (16M) 51GA (0EG) 67 67 51 67 67 67 67 67 67 67 67 67 67	10 95 00 4TA) 8.73	S	AID 8	) 25 41 T	••	-			
	19.38 0.56 0.56 0.56 0.56 0.56	(84) 10 (C) (C) (B) 10 (C) (B) 10 (C) (B) 10 (C) (C) (B) 10 (C)	W/CM2 .07(16M) .93 (16M) .93 (16M) 8 SIGA (DEG) 67 67 67 67 67 67 67 67 67 67	.00 ATA) 8.73	:	2	3660 HI	OTL 8:	70 1	BILITY (MI) MID 7 H MID 3	) 25 HI TOTL 3660 HI P= 59	ار ۲
ε	1 E 0 m m	8 6.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	0 S 1 G A ( 0 E G ) 1 G S 1 G A 1 G S 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G A 1 G	-	. N . W	(8M) (8M) (8M) (8M)	MW/CM2 1.97(16) (0BSERV 5.26 (1	40# .	192	-5.44 (8M) .17 (8M) (8M)	CM2 7(16 7(16 8) 11	.37 0ATA1 1.0890
8+1 :			- 6 9 5 5	SIGE :	WD DEG) (	WS TEI	MP SISA	SIGE :	WD (DEG)	WS TEM	4P STGA	SIGE :
841 :			2000			9				80		
,			50 50		. 81	~ 8	.40 10.9		20.		.10 16.6	
•			•			.56 8	98.	8 6		1.85 10.	10.03 6.1	3.6
32. : 167				1.6:		12		14				3.3
161 : .	3.60	14.	54	2.1:	93.	.06 13	.68	9.7	197. 6	1	3.	2.4:
LEAST SQUARES FIT	FITTED DATA	4										
HEIGHT (M) : (I	HS H/S)	TEMP (C)	SIGA (DEG)	\$16E :	MS (M/S)	TEMP (C)	SIGA (DEG)	SIGE :	WS (W/S)	TEMP (C)	SIGA (DEG)	SIGE :
1.0	1.24	9.42	3.7	. 2.	1.10	7.	14.6	11.2 :	.57	8		6.0
		99.6	3.8	.3	1.32	7.38			.86	60.6		5.2
•	.89	10.14	3.9		1.59	7.			1.29	9.34		4.5
. 0.8		10.11	0.4		1.92	8 0	17.1	12.3	1.95	10.95	000	3.0
	3.52	14.26		1.6	2.78	12.32			4.43	12.41		3.0
•		14.52		: 0.5	3.10	13.			5.63	13.09		2.7
no :	10 Z0/NO	DT H/02	BU*100		20/00	DTH/02	80*100	»I	20/00	OTH/02	BU*100	R.I.
			3.648	: 00	0660.	.2203	.83	. 00.	.1818	.1598	5.301	00.
			8.380	: 00	9650.		2.16	: 000	.1370	.1444	8.422	00.
39.2*	9000	1 6561.	10.888	000	.1438		41.374	00.	.1188	1137	13.248	000

OBSERVED CATA																	
	DA	DATE 07/03/77		TIME	E 22:00:00		DATE	: DATE 07/03/77 TIME 23:00:00	MIT T	£ 23:00		DATE	: DATE 08/03/77 TIME 00:00:00	T 177	IME 00	00:00:	
		A.	MEATHER			••		WEATHER	HER				MEA	WEATHER			••
•		TEMP	TEMP DEG C		7.5	••		TEMP DEG	DEG C	7.3			TEMP	TEMP DEG C	7.		••
	0	DEM POINT DEG	DEG C	1	7.0	••	DEW	DEN POINT DEG	DEG C	-7.8	•	DEN	DEW POINT DEG C	DEG C	-8.3	3	••
	>	VISIBILITY (MI	Y (MI)	25		••	VIS	VISIBILITY (MI)	(IW)	25	**	VIS	IBILITY	( (MI)	25		••
CLD (TENTHS) :	FLOW	OIW.	I H I		9 TOTL		10:LOW	MID	H -	9 TOTL	TL 10:	LOW.	MID	I	01 1	10 TOT 10:	:0
CLD HT (M) :	LOM:		MID 3	3660 HI		: 5609	LOW	N	MID 366	3660 HI	: 5609	" LOW		MID	H	6009	••
EXPONENTS :	: A=	48 8=92 P=	92	P=	.32	••	A= -	A=30 B=85 P=	85 P=	.28		A= -	A=24 B=31 P=	31	4. =d	2	••
NET RADIATION :		•	-7.95 MW	IM/CM2	2	••		•	-6.48 MW/	8 MW/CM2	•			-6.14 MW/CM2	W/CM2		••
RICHARDSON NO.:		(4M) .05 (8M)	( 8M)	1110	16M)	. 20 :	(4M)	.04	1. (MI	(M91)0	.20	(4M)		[ 8M ]	14(16	4) .22	••
		(39.192M)		( OBSE	RVED 0	SSERVED DATA):	(39	92M1	.76 (OBSERVED DATA):	SERVED	DATAL		192M)	.08	DRSERV	.08 (ORSERVED DATA)	:
(1/1)	4)	(4M) .21	( 8M)	.36	(H91)	:15. (M91) 9E	(4M	.16 (8	1M1 .3	W911 0	:64.			[ 8M)	.54 (1		:09.
USTAR :	+) :	(4M).3174	(8M).305	9501	(16M).	2950:	(4M)	1.3640 (8M).3380 (16M).3097:	3M1.338	W91) 0	.3097:		.1811	(8M).1	11) 988		1:
	3	D WS	TEMP	!	SIGAS	SIGE :	9	N.	TEMP	SIGA	SIGE	Q.M			P SIG	SIGE	! "
HEIGHT (M) :	: ( DEC )	(S/W) (9	(3)	_		(DEG): (DEG)	(DEG)	(M/S)	(3)	(050)	(DEG):(DEG)	(DEG)	(M/S)		(030) (0)		
1.			9.	9.50		"			9.75					6.80	80		
2. :	210.	0. 4.05	5 10.13	13	9.6	••	211.	49.4	10.24	6.2		169.				6.6	••
4.		4.87		99		••		5.41	10.63		•				24		••
. 8	206.			14	4.7	3.8:		6.30	10.94	4.5	3.7		3.6				::
16.	61 :			20	3.7	2.8:		7.78	11.73	3.2	2.9		4.9				5:
32.	198			55	1.9	1.5:	197.	10.13	12.95	2.7	1.5:	189.	7.51	40°11 1	4.9 40	.4 5.2	5:
. *8*	50	6. 10.84		56	1.2	.7:	204.	10.76	13.34	5.4	.8.		9.6				*
	1																!

				••		••	••	••
13.0	8.5	5.5	3.9	RI	00.	00.	00.	00.
14.0	10.0	7.2	5.5	BU*100	1.276	2.436	3.898	3.261
7.07	7.46	9.44	11.58	DTH/DZ	1761.	.1748	.1303	.0444
1.58	2.94	5.45	8.89	20/00	.3072	1602.	.1424	1356
						••	••	
24.9	7.7	5.4	6.	RI	00.	00.	00.	00.
7.9	5.5	3.4	2.4	BU*100	.262	.636	1.308	1.667
10.00	10.42	11.80	13.33	DTH/DZ	.1403	.1251	.0945	.0344
3.71	5.44	7.98	10.81	20/00	.3492	.2114	.1280	.0394
						••	••	
30.5	8 4	2.4	6.	R.I.	000	00.	00.	00.
9.9	3.7	2.7	1.6	BU*100	.427	.962	1.779	1.727
9.84	10.40	12.22	13.91	DT H/DZ	.1843	.1618	8911.	.0350
3.14	4.88	7.60	10.79	20/00	.3626	.2252	11411	0090
					-	••	••	
1.0	8.00	16.0	48.0		4.0	8.0	16.0	39.5*
	: 3.14 9.84 9.9 30.5 : 3.71 10.00 7.9 24.9 : 1.58 6.87 14.0 : 3.91 10.03 7.2 16.1 : 4.49 10.14 6.4 13.8 : 2.16 7.07 11.8	: 3.14 9.84 9.9 30.5 : 3.71 10.00 7.9 24.9 : 1.58 6.87 14.0 : 3.91 10.03 7.2 16.1 : 4.49 10.14 6.4 13.8 : 2.16 7.07 11.8 : 4.88 10.40 5.1 8.5 : 5.44 10.42 5.2 7.7 : 2.94 7.46 10.0 : 6.09 11.08 3.7 4.5 : 6.59 10.93 4.2 4.3 : 4.00 8.19 8.5	3.14 9.84 9.9 30.5 : 3.71 10.00 7.9 24.9 : 1.58 6.87 14.0 3.91 10.03 7.2 16.1 : 4.49 10.14 6.4 13.8 : 2.16 7.07 11.8 4.88 10.40 5.1 8.5 : 5.44 10.42 5.2 7.7 : 2.94 7.46 10.0 6.09 11.08 3.7 4.5 : 6.59 10.93 4.2 4.3 : 4.00 8.19 8.5 7.60 12.22 2.7 2.4 : 7.98 11.80 3.4 2.4 : 5.45 9.44 7.2	1.0 : 3.14 9.84 9.9 30.5 : 3.71 10.00 7.9 24.9 : 1.58 6.87 14.0 13.0 2.0 : 3.91 10.03 7.2 16.1 : 4.49 10.14 6.4 13.8 : 2.16 7.07 11.8 10.5 4.0 : 4.88 10.40 5.1 8.5 : 5.44 10.42 5.2 7.7 : 2.94 7.46 10.0 8.5 8.5 8.0 : 6.09 11.08 3.7 4.5 : 6.59 10.93 4.2 4.3 : 4.00 8.19 8.5 6.8 16.0 : 7.60 12.22 2.7 2.4 : 7.98 11.80 3.4 2.4 : 5.45 9.44 7.2 5.5 3.9 32.0 : 9.48 13.64 1.9 1.2 : 9.66 12.96 2.7 1.3 : 7.42 11.08 6.1 4.5 3.9 48.0 : 10.78 13.91 1.6 .9 : 10.81 13.33 2.4 .9 : 8.89 11.58 5.5 3.9	3.14 9.84 9.9 30.5 : 3.71 10.00 7.9 24.9 : 1.58 6.87 14.0 3.91 10.03 7.2 16.1 : 4.49 10.14 6.4 13.8 : 2.16 7.07 11.8 4.88 10.40 5.1 8.5 : 5.44 10.42 5.2 7.7 : 2.94 7.46 10.0 5.09 11.08 3.7 4.5 : 6.59 10.93 4.2 4.3 : 4.00 8.19 8.5 7.60 12.22 2.7 2.4 : 7.98 11.80 3.4 2.4 : 5.45 9.44 7.2 9.48 13.64 1.9 1.2 : 9.66 12.96 2.7 1.3 : 7.42 11.08 6.1 10.78 13.91 1.6 .9 : 10.81 13.33 2.4 .9 : 8.89 11.58 5.5 10.70 01/02 07H/02 8U*100 RI : 0U/02 07H/02 8U*100 RI : 0U/02 07H/02 8U*100	3.14 9.84 9.9 30.5 : 3.71 10.00 7.9 24.9 : 1.58 6.87 14.0 1 3.91 10.03 7.2 16.1 : 4.49 10.14 6.4 13.8 : 2.16 7.07 11.8 1 4.88 10.40 5.1 8.5 : 5.44 10.42 5.2 7.7 : 2.94 7.46 10.0 5.09 11.08 3.7 4.5 : 6.59 10.93 4.2 4.3 : 4.00 8.19 8.5 7.60 12.22 2.7 2.4 : 7.98 11.80 3.4 2.4 5.45 9.44 7.2 9.48 13.64 1.9 1.2 : 9.66 12.96 2.7 1.3 : 7.42 11.08 6.1 10.73 13.91 1.6 .9 : 10.81 13.33 2.4 .9 : 8.89 11.58 5.5 10.70 0.70 0.70 0.70 0.70 0.70 0.70 0.70	3.14 9.84 9.9 30.5 : 3.71 10.00 7.9 24.9 : 1.58 6.87 14.0 1 3.91 10.03 7.2 16.1 : 4.49 10.14 6.4 13.8 : 2.16 7.07 11.8 1 4.88 10.40 5.1 8.5 : 5.44 10.42 5.2 7.7 : 2.94 7.46 10.0 5.09 11.08 3.7 4.5 : 6.59 10.93 4.2 4.3 : 4.00 8.19 8.5 7.60 12.22 2.7 2.4 : 7.98 11.80 3.4 2.4 5.45 9.44 7.2 9.48 13.64 1.9 1.2 : 9.66 12.96 2.7 1.3 : 7.42 11.08 6.1 10.73 13.91 1.6 .9 : 10.81 13.33 2.4 9.9 : 8.89 11.58 5.5 10.70 01/02 07H/02 8U*100 RI : 0U/02 07H/02 8U*100 RI : 0U/02 07H/02 11.276 1.3626 .1843 .427 .00 : .3492 .1403 .262 .00 : .2091 .1748 2.436	3.14 9.84 9.9 30.5 : 3.71 10.00 7.9 24.9 : 1.58 6.87 14.0  3.91 10.03 7.2 16.1 : 4.49 10.14 6.4 13.8 : 2.16 7.07 11.8  4.88 10.40 5.1 8.5 : 5.44 10.42 5.2 7.7 : 2.94 7.46 10.0  6.09 11.08 3.7 4.5 : 6.59 10.93 4.2 4.3 : 4.00 8.19 8.5  7.60 12.22 2.7 2.4 : 7.98 11.80 3.4 2.4 5.4 5.45 9.44 7.2  9.48 13.64 1.9 1.2 : 9.66 12.96 2.7 1.3 : 7.42 11.08 6.1  1 10.73 13.91 1.6 .9 : 10.81 13.33 2.4 .9 : 8.89 11.58 5.5  1 00/02 0TH/D2 BU*100 RI : 0U/02 0TH/D2 BU*100 RI : 0U/02 0TH/D2 BU*100  1 .3626 .1843 .427 .00 : .3192 .1403 .262 .00 : .2091 .1748 2.436  1 .2262 .1618 .962 .00 : .2114 .1251 .636 .00 : .2091 .1748 2.436  1 .1618 .962 .00 : .1280 .0945 1.308 .00 : .1424 .1303 3.898

LEAST SQUARES FITTED DATA

10: 10: 17: 17: 17: 139: 139: 139: 139: 139: 139: 139: 139	GE : EG): 33.4: 1.8:
######################################	SI
03:00 03:00 03:00 16.01 16.01 16.01 16.01	1.164 7.7 7.7 6.3 4.5 3.7 2.4
11 ME 11 259 ME	50 880 002 73 73
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	TEMP (C) 9.16 9.50 9.80 10.02 10.64 11.22
03/7 WEAT MMP D NNT D IITY IID M I B M I W I W I W I W I W I W I W I W I W I W	M.S. M.S. 3.53 4.21 5.04 6.21 7.89 9.55
7E POI 181L 0 M 0 0 M 0 0 192M 192M 192M 192M 192M 192M 192M 192M	
: DATE 03/03/77 TIME 02:00:00 : DATE 0 : WEATHER : TEMP DEG C	MS TEMP SISA SIGE: WD 9.80 (DEG): (DEG) (D
10:L 10:L 22: 23:	GE: DEG): ( 4.0: 3.6: 1.7:
0:00 0:00 6095 0AT	S16 (0E
DATE 08/03/77 TIME 02:00:00 WEATHER  TEMP DEG C 8.1 DEW POINT DEG C -9.9 VISIBILITY (MI) 25 LOW MID 8 HI 2 TOTL LOW MID 3660 HI 6095 A=35 B=46 P= .25 (4M) .02 (8M) .06(16M) .13 (4M) .02 (8M) .06(16M) .13 (4M) .08 (8M) .14 (16M) .39	15A 7.1 7.1 5.2 4.2 2.2
1 25 1 25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (
HER C C C C C W N N N N N N N N N N N N N N	TEMP (C) 9.80 10.14 10.43 10.61 11.17 11.75 112.06
03/77 WEATHER MP DEG NT DEG ITY (MI ID 8 MID 8 = -46 12 (8M) 11 . 11	MS (M/S) (M/S) 5.41 6.32 7.29 10.64 110.64
7 TE POIL 18 11 18 11 18 11 18 11 18 11 18 18 18	
DATE  DEW  VIS  LOW  CLOW  A=-  (4M)  (4M)	SIGA SIGE: WD (DEG): (DEG) (DE
10:L0:L41::	GE: BGD:(
0000 DE 6095 DAT.	SIG (DE
FER 7.6 (C -6.6 (G C -6.6	116A 8 8 4 8 9 4 4
7.6 25 7.6 25 11 4 1 660 HI P= .25 W/CM2 .16(16M 08SERVE .16 (16	1 6 7 6 8 0 8 1
3/77 TIME 0 EATHER P DEG C T DEG C -6 TY (MI) 25 D 6 HI 4 MID 360 H = .17 P=3.63 MW/CM2 (8M) .16(1 (8M) .2116 (	# 0 8 9 9 9 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	MS (M/S) 3.27 3.98 4.68 5.56 6.45 7.45
7 E E E E E E E E E E E E E E E E E E E	E www.or
DATE 08/03  TEMP  DEW POINT  VISIBILIT  LOW 0 MID  LOW 0 MID  (4M) 007  (4M) 07  (4M) 34  (4M) 34	177. 177. 178. 168. 176. 176.
: DATE : DEW : DEW : VISI : VISI : VISI : VISI : CLD HT (M) : LOW : LOW : EXPONENTS : A=	HEIGHT (M) : (DEG)  1. : 177. 4. : 172. 16. : 168. 32. : 176. 48. : 193.
CLD (TENTHS CLD HT (M) EXPONENTS NET RADIATIO RICHARDSON N	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
CHAPONE CHAPONE	H I
Z Z Z Z Z Z	

	••	SM		SIGA	SIGE		SM	TEMP	SIGA	SIGE	••	SM	TEMP	SIGA	SIGE
PEIGHT (M)		(M/S)	(0)	(DEG)	(DEG)		(4/8)	3	(DEG)	(DEG)		(M/S)	(0)	(DEG)	(DEG)
1.0		2.17	9.03	7.7	2.3		4.44	16.00	10.0	11.4		2.75	9.37	11.11	11.9
2.0	••	3.30	41.6	7.9	5.6		5.28	10.09	7.8	8.3	••	3.41	79.6	8.7	8.6
4.0	••	3.93	9.33	8.0	5.9	••	6.59	10.27	1.9	0.9	••	4.22	6.65	6.9	6.3
8.0	••	4.67	89.6	8.1	3.2	••	7.50	10.59	4.8	4.4	••	5.22	86.6	5.4	4.6
16.0	••	5.56	10.26	8.3	3.6		8.93	11.14	3.8	3.2	••	94.9	10.56	4.2	3.3
32.0	••	19.9	10.88	8.4	4.1		10.64	11.84	3.0	2.3	••	8.00	11.36	3.3	2.4
48.0	••	7.32	10.80	8.5	4.4		11.78	12.03	5.6	1.9	••	90.6	11.68	5.9	2.0
		20100	DT H/DZ	BU*100	12		20/00	0TH/02	80*100	12		Z0/N0	DTH/D2	BU*100	18
4.0		.2286	.1013	.365	00.		.3688	.0926	.129	00.	-	.3021	.0958	. 299	00.
8.0	••	.1360	.0875	.890	00.		.2197	.0824	.324	00.	••	.1870	.0863	.702	00.
16.0	••	6080.	6650.	1.716	00.		.1308	.0621	189.	00.	••	11157	.0675	1.430	00.
30.2*		0425	0000	2.227	00		0056	7000	1 200	00		10.17	0170	2 040	00

	DA :	DATE 08/03/77		TIME 04	04:00:00		DATE	: DATE 08/03/77 TIME 05:00:00	TIM	E 05:0	00:0	: DATE	DATE 08/03/77		TIME 36:00:00	00:0
		T.	WEATHER			••		WEATHE	HER				WEA	WEATHER		
		TEMP	TEMP DEG C	8	6.	••		TEMP DEG	3 9E	8.8			TEMP	DEG C	7.8	
		DEM POINT DEG	DEG C	•	12.0	••	DEW	POINT D	2 93	-12.1		: DEN	POINT	DEG C	-11.3	
	-	ISIBILIT	(IN) A.	2		••	VISI	BILITY	(MI)	25		: VIS	IBILITY	(IW)	25	
CLD (TENTHS)	FOM:	IH OI GIW C M	H 07 (	1	TOT	MO1:01	MO	IH O MID 10 HI	10 HI	10	TOTL 10	10:LOW	IH OI OIW O MO	IH 01	TOTL	L 10:
O HI (M)	. LOW	•	MID 3660	H 099		••	. LOW	MID	D 3050 HI			MOT :	Ĭ	MID 3660	1H 05	
EXPONENTS	= V :	12 8=	.03 P=	. =d	28	••		.06 B=	=d 69.	10.		: A= -	A=11 B=02 P=	02 P:	21	
NET RADIATION		•	-4.32 MW/C	W/CM2		••		-3.	.97 MW/CM2	CM2			-3	.97 MM	MW/CM2	
RICHARDSON NO. :		(4M) .12 (8M)		.28(1	. (M9		( M+)	.13* (8	****(W	*(16M)	****	••	1 61.	8M)	51(16M)	1.25
		(39.192M)		COBSER	ERVED DATA)		(39.1	92M1 2.	85 (08	SERVED	DATA		192M1 2	.57 101	SERVED	DATA
(1/1)*10	. (4	(4M) .82	( 8M)		(16M) 2.74:		(4M)	(4M) 95* (8M)**** (16M)***	M) * # # *	* (16M	*****		(4M) 1.76 (8M) 5.51 (16M)15.45	8M) 5.	51 (16M)	115.45
USTAR	. (4	(4M).1682 (8M)	(8M).1.	.1385 (	(164).1		(4M)	.157* (8M).0000 (16M).0000:	M) . 000	W911 0	1.0000		(\$M).1872 (	(8M).124	.1249 (164).0757	.0757
	9	D WS	TEMP	P SIGA		GE :	Ç	MS	TEMP	SISA	SIGE	OM .:				S16E
HEIGHT (M)	: ( DEC )	(S/W) (9		-		(DEG): (DEG)	0EG)	(M/S)	(3)	(C) (DEG)	(DEG): (DEG)	: ( DEG )	=		(C) (DEG)	(DEG):
1.			7.1	7.86		-			4.92					4.4		
2.	: 14	141. 2.50			12.6		57.	2.40	5.18	11.5		: 134.			0.6 0	
4.		3.08				••		3.09	5.57							
8	: 138		96 -8 - 58	_	10.1	5.5:	54.	3.86	6.43		1.5:	: 130.	4.92	5.37		3.1:
16.	: 13	8. 4.70				5.6:	55.	3.60	96.9	8.3		: 132.			8 5.0	2.4
32.	: 147					5.7:	.69	2.91	7.14			: 147.				2.2
48.	: 160					5.8:	108.	2.57	7.57	150		: 165.				3.3

LEAST SQUARES FITTED DATA	ES	FITTED	DATA												
HEIGHT (M)		WS (M/S)	TEMP (C)	\$ 16A (DEG)	SIGE (DEG)		WS (M/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		WS (M/S)	TEMP (C)	SIGA (DEG)	\$16E
1.0	-	2.09	8.03	13.4	5.1		2.95	5.17	9.1	4.		2.98	4.35	8.7	2.9
2.0	••	2.54		12.3	5.2		2.97	5.30	9.5	9.	••	3.45	4.55	8.0	5.9
4.0	••	3.09		11.3	5.3		3.00	5.55	10.0	6.	••	4.00	4.95	7.4	2.8
8.0	••	3.17		10.4	5.5		3.02	10.9	10.4	1.5	••	4.63	5.71	6.9	2.8
16.0	••	4.59		9.5	5.6		3.04	6.76	10.9	5.4	••	5.36	7.07	6.3	2.7
32.0	••	5.58		8.7	5.7	••	3.06	7.56	11.4	3.9	••	6.21	9.18	5.9	2.7
48.0	••	6.26	10.69	8.3	5.8		3.09	7.42	11.7	5.1	••	91.9	10.45	9.6	2.7
		20/00	DTH/D2	BU*100	R.I		20/00	07H/02	BU*100	æ		20 / no	DTH/D2	BU*100	18
4.0	-	.2042	.1419	.826	00.		.0073	.1293	.810	00.	!	1961.	.2031	.716	00.
8.0	••	.1243	.1226	1.922	00.	••	.0037	01111	2.736	00.	••	.1135	6981.	1.960	00.
16.0	••	1570.	.0840	3.544	00.	••	6100.	.0744	7.208	00.		1590.	.1545	4.810	00.
39.5*	••	.0394	.0162	2.550	00.		. 0213	.0369	26.030	00.	••	1820	.0587	8.320	00.
	-					-					1				

_
⋖
-
⋖1
0
-
٥
ш
>
α
SE
80
0

	: DE	TEMP DEW POINT	TEMP DEG				TEMP DE	MEATHER MP DEG C	4.9	4.0	DEW		C 6.7	-0	
RADIATION		ISIBILITY O MID	325	50 I 745 HI	TOTL 10	7 7 7 7	I SIBIL	E o	1 50 HI 1 TC	OTL 10:	LOW COM	VISIBILITY (MI DW 0 MID 9	- I 2	TOTL	:01
		15	8=39			. A=	60	43			A=	49 8=3	7 P=	23	
	.: (4H)		-3.21 .06 (8M)	.15(16M)			.1		.68*(16M)		( k 4 )	~ -			. 79 :
11.62	: (38	61		( OBSERVE	0	-	1924		0	DATA	139.1	2M1	COBSE	-	ATA :
(1/L)*10 USTAR	(4N)	1).1955	(8M)	.1779 (16M)	M) 1.84:		4M) 1.2	1.28*(8M): 9 097* (8M).0	•10	54*(16M)***** 6* (16M).0105	(4 H).	5.57 (8M) 0365 (8M)	.0368	1164).	6.37:
	3		WS TE	TEMP SIGA	1	1.	GM	1 1	MP SIGA		OM :	#S T	EMP	!	SIGE :
HEIGHT (M)	0		-	2	(DEC)	0:	£ .	/S) (C)	( 0EG )	5	0	-	(0) (0)		(050)
1.			5	.19				4	.12				5.62		
2.	: 128			1 26.		. 4	44. 1	4	.34 26.4		. 504.	.80		6.94	••
•	••						1	4				1.02			
8.				8				2	.13 23.9		: 241.	1:31		37.4	. 0.4:
16.	: 125			4	~			S	22	-	. 544.	1.96		4.2	7.0:
32.	: 133.		7 09.9	.76 9.0	2.1:		39. 2	2.52 5.	.80 21.3	2.0		3.17	8.93 1	13.3	5.7:
48.	141 :		1	.32	2			-	2	3.2	: 274.	4.33	!	5.0	5.3:
LEAST SQUARES		FITTED DATA	ATA												
		MS	TEMP	SIGA	SIGE		MS	TEMP	SIGA	516	W.S.		IP SIGA		\$ 3918
HEIGHT (M)		(N/S)	(3)	(DEG)	(DEG)		(M/S)	3	(DEG)	(DEG)	/W)		-	) (DE	. 19
0 %		1.98	5.30		9.1		1.51	4.30	28.2	.5		_		21.	2 :
2.0		2.47	5.37	33.7	7.0	••	1.68	4.40	26.6	. 7.		.71 5.90			. 4
4.0		3.09	5.51	23.7	5.3	••	1.87	4.60	25.1	6.	-	3			1 :
8.0		3.85	5.81	16.7	4.0	••	2.08	4.96	23.6	1.3	-1	6	28.8		
16.0		4.80	6.43	11.8	3.1	••	2.31	5.52	22.3	1.7	2.	9			. 9
32.0	••	2.98	1.79	8.3	5.3	••	2.57	90.9	21.0	2.3	3.	2			. 6
48.0		6.80	9.31	8.9	5.0		2.73	5.80	20.3	2.1	3.				-
	na :	20/00	DTH/D7	80*100	18		20/00	20/HT0	80*100	R.I.	20/1:0	Z 07H/0Z	BU*100	0 R1	
4.0		.2287	.0832	164.	00.		0990	.1025	1.657	00.	.129		8.960		: 00
8.3		.1426	.0863		00.		.0367	.0870	4.545	00.	0550 .		14.905		: 00.
16.0		.0889	.0926	3.610	000		0204	. 0559	9.438	00.	0890 .	6501. 0	20.067		
*7.66		1670.	1010				010	0610	4.488	00.	210.	1	13.441		. !

CTFNTHS)			!	!			-				-		-			
		DATE US	0	TIME	10:00:00	. 00:	DATE OF	8/03/77	TIME 11	:00:00:		DATE O	8/03/77 WEATUED	TIME	E 12:30:	0:00
		16	TEMP DEG	ن	7.3	• ••		TOMP DEG	U	0			TEMP DEG	2 0	1111	
		DEM POINT	NT DEG	•	8.3	••	DEW P	CINI	v	7	••	DEW P	POINT DEG	U	-7.5	
		ISI	-	1 50			VISI	-	1 85			ISI		-	85	
	:	0	0		101	1:01		WID W	1 IH	TOTE	1:01		5	0	2	(
CLD HT (M)		0	MID = 4	15 P-	141		LUM A= 1	AID A	0447	2 6095		-	5	22 0-	17	6669
NET RADIATION		01.	9	2		• ••	•	13.74		•	• ••		34	40 PW/C	M2.	
RICHARDSON NO		(4M)	-	.250	16M)	. 52 :	- (44)	18 (84	13(16M)	i	. 9	- (M4)	-	1-2.4	-	16.4-
		61	.35	COBSERVED		-	(39.192	=		DA	A):	(39.19	2M1-2.38	8 (08	SERVED	AC
(1/L)*10			(8M)	1.53		2.84	1 (	14 (	19	-	18	(4M)-2.34	-	1-3.2	-3.26 (164)	(164)-3.26
USTAK		160.( wt)	3 (8M).	0744	( LOM )	2	(4m) . Z	3 (84)	. 2858	87.(M91)	35:	001-160		501.	911 7	116m1.1068
	••	8		S		16E :	Q.	N.S	S			GM		EMP		SIGE
HEIGHT (M)	:	:(DEG) (M	M/S) (C	(0)	ĘG) (	( DEG) : (	(DEG)	(M/S) (	(C) (DEC)	(DEG)	9:19	DEG	(M/S)	(3)	(DEC)	(DEG)
1.			8	.30					9.15					10.53		
2.	••	46. 1		14.	24.5	•	357.	.34	9.12 8	.1	••	100		10.40	41.6	
4.	••	-				••		.75	86.8		••		10.	10.21		
*	••	45. 1	18.		22.3	6.3:	356.	4.12	8.76 7	0.	==	88.	1.09	6.62	32.0	20.0
16.	••		81.		∞ ⋅	6	343.	•43	.77	4.	.6.	.49	1.19	6.66	56	24.
32.	••	26. 2	16.	8.74	0	4	345.	• 16	.53	•	.0.	.15	1.27	9.82	22	50.
48.	.		.31	!	7	? !	2.	.10	.35	-		040	1.43	4.33	3	30.
LEAST SQUARES		FITTED D	DATA													
		MS	TEMP	S	IGA S	: 16E :	MS	TEM	MP SIGA	516	w	MS	TEM		SIGA	SIGE
HEIGHT (M)	••	(M/S)	(3)	0	-	-		(0)	1066	ш		CM/S	•	-	DEGI	(DEG)
1.0		1.10	8.33			9.5 :	3.11			8.3		.87	10.			12.7
2.0		1.32	8.36	26.			3.4(	0	80	7.5		6.	10.			6.41
0.4	••	1.60	8.40	23.		. 8 .	3.7		1	6.8		1.0	10.	_		17.3
8.0		1.93	8.49	20.		. 0.	4.05		9	6.2	••	1:1	10.			20.2
16.0	••	2.34	8.62	18.0			4.45	2 8.73	6.2	5.6		1.2	1 9.97		29.0	23.6
32.0	••	2.83	8.74	12.			4.8		0	5.1	••	1.3	6	_	~	57.6
48.0		3.10	8.68	14.		. 4.0	0 !		•	4.8	.	1.3				30.2
		20/00	DT H/ DZ	BU*100		. 18	20/00	DTH/02	80*100	RI	••	20/00	DTH/DZ		8U* 100	18
4.0		1018	.0312	.678		: 00	1601.	0160	065	02		.0278			1.023	.33
8.0	••	5190	.0276	99		: 00	.0596	0133	180	07	••	1510.	0162	'		2.97
16.0		.0372	9070	4	6	. 00.	.0325	•	355	26		.0082		•		06.4
39.5*	••	.0250	.0063	64	•	. 00	.0212	0013	277	-119	••	00100		-2	316-591	

_
d
0
0
w
>
œ
W
S
8
0
*

	••	DATE 08	77/20/80	11 7	ME 1	3:00:00	. 0	DATE 0	08/03/7	11	ME 1	4:00:00		DATE OF	8/03/17	11	ME 15:0	15:00:00
		1	TEMP DEG	THER DEG C	12.9	0 4		7	WEATHER TEMP DEG		13.5				TEMP DE	THER DEG C	14.9	
10014017	:	VISI		-	85	101		VISIB	IL ITY	N I		0.1.0		_	IL ITY	-		F
五 子 子	:	507	N.	54	HI O	609	5	LOW	-	0			:		-		HI 7	7620
	••	A=12	8=	.22 P=	* .08	89	••	A=0	8 8	61				0.		90		
NET RADIATION RICHARDSON NO	 zo	(4M) - (39.192)	4 *	¥-107	/CM2 67() 85 EF	.3.	3.43 : DATA):	-	33 28 ( 24)-2 78 (	M 000	0>-	-10-1		(4M)7	23 -3 -3	1 1	116	401
USTAR	-	- 1	- 1.	8M) . 27	2   3	5M1.2	: 5	• 1	+   9	M) . Z		M) - 27	112	- 1	-!.	- 13	=   5	- 1:
HEIGHT (M)	::	056)	(M/S)	CC	(DEG)	, –	DEG):(	DEG.)	(M/S)	10	(DEG)	0E	3):(5	DEG!	(N/S)	CO	(DEG)	(DEG
1.				12.0	2	1										4		
2.	••	13.	2.73	8	_	.3	••	. 55	2.89	~	19.	0	••	41.	.82	~ 1	21	
*	••	3.	5.94	4	.3 14.	2	••	45.	3.18	2	17.		•	37.	• 05	<b>~</b> .	21	•
	•••	13.	3.18	0	+	0	: 4.	56.	3.44	7	91		:1:		5:		5.	
16.			3.38	0.11	61 0			43.	3.09	1.21	91	12			45	_ ~	27	
48.		19.	3.50	0.5	22	1 9	1.4:	55.	4.04		14.	6 13	:-:	37.	2.35	12.10	33.4	19.6
LEAST SQUARES		FITTED	DATA	383														
	••	MS	TE	TEMP	SIGA	SI	. 39	MS	_	EMP	SIGA	SIG		MS	TE	MP	SIGA	SIGE
PEIGHT (M)		(M/S)		C	(DEG)	(DE	: (9	S/W)		3	(DEG)	(DEG		(M/S	2)	5	neg)	(DEG)
1.0		2.63	3 11.7	8	17.0			2.7	3 12.	88	19.7	6.3	••	1.77	13.	27 1		13.2
2.0	••	2.78			15.7		3 .	2.9	4	18	9.81			8	13.		1.6	13.9
4.0	••	2.94			14.5			3.1	9	69		8.3		0	13.		0.0	14.6
8.0		- "		9 0	13.4	-		3.4	0 11	41	16.7	6	•• •	- "	.12		6.0	15.4
10.0		.4			11.6			0 0		. 67	0.01			24	12.		2.1	
48.0		3.6	101	.58	6.01			4.0	1 6	32		13.2		2.48	8 12.1	13	23.3	17.71
		20/00	DTH/DZ	!	0*100	1 %		20/00	-	1	80*100	RI		20/00	DTH/D	- 7	RU* 100	12
4.0		.0549	1640-			- 1		.0763	1	0	.264	07		4040	0341	•	468	60
8.0	••	.0290			.93	4		01+0.	i	- 9	75	4.	••	.0215	.02	'	615	70
16.0		•0154	0235	7		2.1	. 9	.0220	022	1- 9	164.	-1.98		*110.	0188	3 -3.	235	46.4
*/**	•				-	C		100	-	-	177			2000	2000	0	017	

OBSERVED DATA	ATA															
	"	DATE	DATE 08/03/77	TI TIME	₹ 16:00:00		DATE	: DATE 03/03/77		TIME 17:00:00	"	DATE	DATE 08/03/77	7 TIME	TIME 18:00:00	: 00:
	••		WEATHER	HER				WEATHER	HER		•		WEATHER	TEP		•
	••		TEMP DEG C	) EG C	14.5			TEMP D	) EG C	14.1	••		TEMP DE		12.8	••
	••	DEM	DEM POINT DEG	2 93c	-8.3		DEW	POINT D	) EG C	-8.7	••	DEW	DEW POINT DEG C		1.9-	••
	••	VISI	VISIBILITY (MI	CIW	20		SIA	VISIBILITY (MI	(IW)	20	•	VISI	VISIBILITY (MI	7	04	
LD (TENTHS)		FLOW	MID	H	3 TOTL	3	HOT:	MID	H	3 TOTL	1:1	LOW	MID	H	3 TOTL	1 3:
CLD HT (M)	••	LOW	MID	0	HI	20	MOT :	Iw	0	HI 7	7623 :	LOW	JIM	0	HI 7	7620 :
EXPONENTS	••	A=	-8 01	-10 P=	.10		: A=	.08 B=	.24 P=	12	•	A= -	A=16 8=	31 P=	.28	•
NET RADIATION			15.	15.21 MW/CM	CMZ			-	.81 MW/CM2	.M2			-7.95	1	. M.2	•
RICHARDSON NO.		(44)	53 (8M)-1.55(	3M 1-1.5		16M1-3.45 :	(4M)	(4M)24 (8	(8M)69	-(m91)6	1.42 :	( M +)	.18 (8M)		.39(16M)	: 65.
	••	(39.1	(39.192M)-4.22	.22 (08SE		RVED DATAI:	(39.	192M1-2.	24 (08	(OBSERVED DATA):	DATA!	(39.1	92M1-1.	52 (085	SERVED	DATA):
(1/1)*10	••	-( W )	(4M)-1.43 (8M)-2.06	3M)-2.0		1-2.27	( 4M)	67 (8	14)9	(16M)	94:	( M + )	1.59 (8)	4) 3.32	(16M)	3.68:
USTAR	••	( M )	(4M).1512 (8M)	3M) . 1555		(16M).1583:	( 4M)	(4M).1699 (8M).1722 (16M).1738: (4M).0859 (8M).0686 (16M).0626:	M) . 172	2 (16M)	.1738:	(4M).	0829 (8)	M1.0686	(164)	.0626:
		Q	SI	TEMP	SIGA	SIGE	3	1	TEMP	SIGA	SIGE :	Q.	N.S	TEMP	!	\$16E :
PEIGHT (M)		( DEC )	(M/S)	(3)	(050)	(056):(056)	( DEC )	(M/S)	(C) (DEG)	(DEG)	(DEG): (DEG)	(DEG)	(M/S)	(3)	(DEG)	(050)
1.				13.39					13.55					11.39		
2.	••	63.	1.49	13.22			129.	1.79	13.36		••	156.	1.33	11.53	5.7	••
*	••	54.	1.69	13.07		•	118.	2.04	13.28		••	146.	1.84	11.81	5.1	••
8.	••	71.	1.80	12.67				2.19	12.82		9.2:		2.45	11.81	3.4	1.2:
16.	••	.09	1.88	12.82				2.31	13.06		11.1:		26.2	12.44	3.3	1.2:
32.	••	62.	2.01	12.53	1 21.1	13.7:	116.	2.53	12.75	16.2	15.0:	148.	3.14	12.30	3.5	1.7:
48.	••	79.	2.14	12.24				2.67	12.51		14.8:		3.31	12.06	3.6	1.9:
The state of the s	1		-	-		1	The state of the s		The state of the s	1 1 1 1		1			1	1

MS	TEMP	SIGA	SIGE	••	MS	TEME	SIGA	SIGE	••	MS	TEMI	P SIGA	A SIGE
2	_!	(DEG)	(DEG)	. !	S/W)		(DEG)	(DEG	-	CM/S			
13.22		29.7	1.6	••	1.6		13.3	5.5	••	1.23		5.8	
13.18		27.7	10.4	••	1.83	3 13.34	14.0	9.9	••	1.48	11.55	5.2	.7
3.11		25.8	11.11	••	1.9		14.8	7.8	••	1.80		4.7	
2.98		24.1	6.11	••	2.16	-	15.7	9.2	••	2.19		4.2	
2.75		22.4	12.8	••	2.34		16.6	10.8	••	2.66		3.8	
24.2		50.9	13.7	••	2.5		17.5	12.8	••	3.23		3.4	
2.29		20.0	14.3	••	5.6		18.1	14.1	••	3.62		3.2	
DT H/ D2	1	BU*100	1.		20/00	0TH/02	BU*100	R.		20/00	DTH/DZ	BU*10	1 0
0241		488	14	"	.0544	0208	288	06		.1177	.0705	1.195	00.
		1.433	-1.00	••	.0295	+110	820	51	••	.0715	.0579	2.656	00.
		-3.185	-5.85	••	.0160	0106	-1.702	-2.85	••	.0434	.0326	4.054	00.
•	_	0.010-1	08.15	••	1800	0050	-3.917	-22.01	••	9010	0350	-2.549	-111.14

LEAST SQUARES FITTED DATA

8888

.2749 .2253 .0919

.2035 .1641 .1323

8888

2.169 4.896 7.442

.3232 .2640 .1455

.1059

4.0 8.0 16.0 39.2\*

DTH/DZ 8U\*100

20/00

801 + 100

DU/02 01H/02

	••	DATE	08/03/77	1118	TIME	E 19	19:00:00		DATE		71/60/80	TIME	20:00:00	00:0	••
	••			WEATHER	~			••		3	WEATHER	~			**
	••		TEM	TEMP DEG C	v	9.1		••		TEM	TEMP DEG	0	3.3		••
	••	DEM	POINT DEG	T DEG	ن	-3.9	•	••	DEW		POINT DEG	ن	-4.2		••
	••	VISI	VISIBILITY (MI)	Y		20		••	VI			=	25		••
CLD (TENTHS)		-0M	MID		Ħ	2 1	TOTL	2:	2:LOW	MID		-	2 TOTL	11	2:
-	••	LOM		MID		H	7620	0	LOW		MID			7620	**
EXPCNENTS	••	A=	30 8=		.34 P=			••	A=	61 8	8=36	=d 91	6		••
NET RACIATION				6		N		••				MW/CM2	.M2		••
RICHARDSCN NO	::	( MY)	.36	( 8M)		82(16M)	11 1.24	: 50	( 4M	1 .26	-		36(16M)	.45	
	**	(39.1	39.192M)	.84		OBSERVED	0	A):	(39	192M)		_	OBSERVED	0	-
(1/1)*10	••	( M+)	5.80	-	_			19:	W+)	3.12	_	"	(16M)	-	6
USTAR	••	(4M).	.1005	-	.0687		(16M).0590:	:069	-	-	-	•	-		7
		9	S.A.		TEMP	SIGA	SIGE	. H.	9	3	MS 1	ENP	SIGA	SIGE	i
HEIGHT (M)		: ( DEG )	(M/S)		3	(DEG)		(DEC):	0	2		3	DEGI	(DEG)	=
1.					6.82							2.17			
2.	••	136.	2.01	11	7.43		4.4	••	135.		.78	2.53	12.6		
4.	••	124.	2.97	16	8.83		2.5	••	130.			3.07	10.6		-
8	••	130.	4.34	_	1.24		0.1	.5.	148.		1.83	3.78	7.9		•
.91	••	125.	4.53		11.92		6.	.2:	148	100	12	5.90	5.3		80
32.	••	126.	4.76		11.98		1.6	.5:	148		11.5	69.6	2.3		1.9:
48.	••	133.	4.	1 06.	11.85	-	• 5	.8:	153	. 6	6.54 1	1.00	2.1	1.2	2
LEAST SQUARES	RES		FITTED DATA	4	9.										
		-	N.S.	TEMP		SIGA	SIGE	. 36		N.S	TEMP	4	SIGA	SIGE	
HEIGHT (M)	••	2	18/4	3		( DEC )	(DEG)	: 15	٤	(M/S)	3		DEGI	(DEG)	
1.0		2.	2.00	7.58		3.5	.,			14.	2.07		23.2	5.9	
2.0	••	2.	2.40	7.93		2.8		2 :		.76	2.38		15.2	4.6	
4.0	••	2.	2.88	8.60		2.3	.3			1.23	2.98		0.0	3.6	
8.0	••	3.		9.81		6.1	.3		T. Carre	1.98	4.12		9.9	2.8	
16.0	••	4		11.65		1.5	4.		N. S. A. D	3.20	91.9		4.3	2.2	
32.0	••	4		13.06		1.2	.5		41	91.5	67.6		2.8	1.7	
48.3	••	5.	5.54	11.44		1:1	•		•	6.82	11.14		7.5	1.5	•

OBSERVED DATA	4														
	: DATE	DATE 09/03/77	77 TIME	E 10:00:00	: 00:0	DATE (	DATE 09/03/77 TIME 11:30:30	MIT 7	E 11:30	: 00:0	DATE	DATE 09/03/17		TIME 12:00:00	: 00:
		WEAT	THER		•		WEATHER	HER		•		WEAT	HER		
		TEMP L		4.6	••		TEMP D	EG C 1	2.2	•		TEMP D		14.41	
	DE	DEM POINT DEG C		-8.9	••	DEW	DEW POINT DEG C	EG C -	8.1	•		TEMP DEG (		-8.9	
	: VIS	VISIBILITY (MI		85	••	VISI	VISIBILITY (MI)	CHI	85	•	VISI	VISIBILITY (M)	=	85	
CLD (TENTHS)	*LOM	OIM 9	7 HI	TOT		LOW 3	MID	3 HI	3 101		HOT:	MIO	H	3 TO1	1 3:
CLD HT (M)	: LOM 2440		MID 3648	Ŧ	••	LOW 2	LOW 2440 MID 3658	0 3658	HI 75	7512 :	M06	MID	0	HI 7512	12 :
EXPONENTS	: A= -	A=21 B= -	10 P=	.15	•	A=	13 8=	-21 P=	.08	•	A=	01 8=	-0 50.	.13	
NET RADIATION		25.33	33 MW/	CM2	•		36.2	I MW/CM2	CM2	•		39.84	1 MM +8	CM2	
RICHARDSON NO.:		(4H)04 (8H)	8M)1.	OM 9	22 :	( H+)	27 (8M)		79 (16M)-1.58	1.58	(4H)21	21 (8M	-	.57(16M)-1.06	1.06 :
		(39.192M)	.15 (085	SERVED	ERVED DATA):	(39.192M	92M1-8.80	_	(OBSERVED DATA)	DATAI	(39.1	(39.192M)-1.	6	(OBSERVED DATA)	DATA):
(1/1)*10	: (4M)	13	[8M]17		15:	(4M)75			.00 (16M)-1.04:	-1.9:	( tH)	59 (8M	_	77 (16M)	71:
USTAR	H+) :	.3643 (			•	-		M1.426	.4261 (16M).4186:	. 41 86 :		(4M).2913 (8M)	•		
	03	SM	!	SIGA	SIGE :	Q¥	SM		SIGA	S16E :	Q.	SA			SIGE :
HEIGHT (M)	: ( DEC )	(M/S)	3	(050)	(DEG) : (DEG)	(DEG)	(N/S)	(3)	(DEC)	(DEG) : (DEG)	(DEG)	(N/S)	3	(DEC)	(DEG):
1.			10.17					13.82					16.33		"
2.	145.	10.4	10.08	4.6	••	162.	4.48	13.52	10.5	••	187.	3.10	15.99	31.0	••
;		4.70			••		5.04	13.04		•		3.48	15.53	,	
	: 138.			7.5	5.1:	155.	5.49	12.58	8.5	5.0:		3.78	14.99		12.1:
16.	: 131.	5.77			4.8:	148.	5.76	12.41		5.0:	173.	4.19	14.96	29.5	12.3:
32.	: 129.			5.3	4.6:	147.	5.85	12.14	6.7	6.0:		4.60	14.63		12.4:
48.	: 138.			4.9	4.2:		2.90	11.94		7.3:		4.73	14.43		13.6:
LEAST SQUARES FITTED DATA	S FITT	TED DATA													
		MS 1	TEMP	SIGA	S16E :	S.		TEMP	SIGA	SIGE :		MS T	TEMP	SIGA	SIGE :

	••	SM	TEMP	S	SIGE	••	MS	TEMP	SIGA	SIGE	••	SM	TEMP	SIGA	SIGE
HEIGHT (M)	••	(N/S)	3	(DEC)	(DEG)	••	(N/S)	3	(DEG)	(DEG)	••	(N/S)	5	(DEC)	(DEG)
1.0		3.79		11.1	6.3		4.43		10.9	3.0		2.86	15.99	31.4	10.7
2.0	••	4.20		9.6	6.5	••	4.69		10.0	3.5	••	3.14	15.90	31.1	11.1
4.0	••	4.65		8.3	5.5	••	4.97		9.5	4.0	••	3.44	15.73	30.8	11.5
8.0	••	5.15		7.2	5.1	••	5.26	12.93	8.4	4.7	••	3.78	15.41	30.5	11.9
0.91	••	5.71		6.2	4.8	••	5.57	-	7.7	5.4	••	4.15	16.41	30.2	12.4
32.0	••	6.32		5.4	4.4	••	16.5		1.1	6.3	••	4.56	14.39	30.0	12.9
48.0	••	11.9	9.11	5.0	4.3	••	111.9		6.7	6.8	••	4.81	14.53	29.8	13.2
		20/00	0TH/02	BU*100	R.I.		Z0/N0	DTH/02	BU*100	. R.		20/00	DTH/02	BU+100	12
4.0		. 1590	0310	079	+0		.0956	0721	160	05		. 1071	0707	323	10
8.0	••	.0880.	0257	215	12	••	.0507	1650	468	21	••	.0588	0580	881	57
0.91	••	.0488	0152	+14	22	••	.0268	0331	935	79	••	. 0323	0325	-1.644	-2.65
39.2*	••	.0238	0025	324	31	••	.0031	0025	383	20	••	. 1800.	0025	603	64

\* OBSERVED DATA

				••			-	=	* !
DATE 09/03/77 TIME 15:00:00  WEATHER  TEMP DEG C 15.6  DEW POINT DEG C -8.9  VISIBILITY (MI) 30  LOW 1828 MID 4572 HI 7620  A= -12 B=08 P= .15  21.70 MM/CM2  (4M)06 (MM)31	3554	SIGE : (DEG):				5.6	5.0	4.8	*
DATE 09/03/77 TIME 15:00:00 WEATHER TEMP DEG C 15.6 DEW POINT DEG C -8.9 VISIBILITY (MI) 30 VISIBILITY (MI) 30 LOW 1828 MID 7 HI 10 TOTL 1 LOW 1828 MID 4572 HI 7620 A=12 B=08 P= .15 21.70 MM/CM2 (4M)06 (8M)16(16M)3 (39.102M)22 (GRSERVED DAT	16M)	¥ 5		14.2		4.2.	1.1	10.2	6.6
TIME 15 C 15.6 C 15.6 C -8. () 30 F572 HI 3 P = .1	22 (	00.							
	3.0	TEMP SIGA	17.	17.12	16.9	16.3	16.4	16.1	15.6
DATE 09/03/77 TIME 15:0  WEATHER  TEMP DEG C 15.6  DEW POINT DEG C -8.9  VISIBILITY (MI) 30  LOW 1828 MID 4572 HI  A=12 B=08 P= .15  (4M)06 (8M)16(16M	8 9	WS (N/S)		3.76	+9.	60.	.63	18.	.45
7 TE POI	.350								
		MD (DEG		303.		599	288	285	297
0 0 0	.06:	SIGE: ND (DEG):(DEG)		••	••	4.5:	4.3:	4.2:	4.6:
C 16.7 C -8.9 J 50 J 50 J 50 J 50 J 50 J 50 J 50 J 60 J 60 J 60 J 60 J 60 J 60 J 60 J 6	N.			.3		.3	9	4	6
E 14:	33	SIG (DEG		11.3				11.4	
1 C L L L L L L L L L L L L L L L L L L	340	TEMP SIGA (C) (DEG)	5.72	15.76	5.65	5.20	5.40	5.15	4.87
03/77 WEATHER MP DEG NT DEG ITY (MID 4 MID 4 9 07 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	88								
09/0 09/0 00/0 00/0 00/0 00/0 00/0 00/0	3404	WS (M/S)		3.65	*	5	5.	. 9	9
: DATE 09/03/77 TIME 14:00:00 :  EMP DEG C 16.7 :  DEW POINT DEG C -8.9 :  LOW 18 HID 7 HI 10 TOTL 10 :  LOW 1828 MID 4572 HI 7620 :  A = .00 B = .01 P = .18 :  (4M)01 (8M)04(16M)08 :  (39.192M)01 (8M)04(16M)08 :	¥ ¥	SIGE: WD (DEG):(DEG)		314.		.808	.76	294.	906
		E :	••	••	••			9.5:	
0:00 620 620	:3	S1G (DE							
ME 13:00:00 :: 16.1 -8.9 50	58 (16M)54: 29 (16M).4456:	SIGA (DEG)		15.1		14.6	13.7	12.7	12.5
- HARIC	58	TEMP S	.32	17.28	.19	90.	+0.	69.	09
MEATHER MP DEG C NT DEG C LITY (MI) ID 6 HI MID 457 MM 43.27 MM 43.27 MM 6 43.27 MM 6 43.27 MM 6 63.27 MM 6 63	(8M)		17						
DATE 09/03/77 T  WEATHER  TEMP DEG C  DEM POINT DEG C  VISIBILITY (MI)  LOM MID 6 H  LOM MID 6 H  A=06 B= .27 M  (4M)15 (8M)15 (8M)		WS (M/S)		5.04	5.56	6.05	6.45	6.83	7.03
DATE 09/03,  WE W	(4M)43								
CON CONTRACTOR OF CONTRACTOR O	33	: ND		: 230.		: 227	: 220	: 219.	: 231
zó	0								
ENTH (M) NTS DIAT	(1/L)*10 USTAR	PEIGHT (M)	=	2.	*	8	16.	32.	48.
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO.	(1/L)	PE 16							

	1
1740	
•	q
C	
C	2
u	Ų
۰	-
i	
CITTIO	Ĺ
	_
	ŧ
7	3
5	9
23041100	2
ς	J
C	7
۰	
L	-
ä	h
24.2	ú
•	-

HEIGHT (M)		WS (N/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		WS (M/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		WS (M/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)
1.0		4.79		16.1	4.1		3.46	15.68	11.3	4.3		3.59	17.08	15.6	4.9
2.0	••	5.14	17.06	15.4	4.9	••	3.92	15.65	11.3	4.3	••	3.99	17.02	14.4	1.9
4.0	**	5.52		14.8	0.9	••	44.4	15.60	11.3	4.4	••	4.43	16.91	13.3	5.8
8.0	••	5.93		14.1	7.2	••	5.03	15.51	11.4	4.4	••	4.93	16.70	12.2	5.4
16.0	••	6.37		13.5	8.7	••	5.69	15,33	11.4	4.4	••	5.48	16.36	11.3	5.2
32.0	••	6.85		12.9	10.5		6.45	15.07	11.4	4.4	••	60.9	15.94	10.4	4.9
48.0	••	7.14		12.6	11.7		6.93	16.91	11.4	*:+	••	6.48	15.88	10.0	4.7
		20/00	DTH/02	80*100	R.I		Z0/N0	0TH/02	80*100	R.	-	20/00	DTH/02	80+100	~
4.0		.1320	0782	138	01		.1846	8410	1,00-	10		6951.	0425	117	06
8.0	••	.0709	0636	391	21	••	. 1046	0126	-109	+00-	••	.0872	0356	317	16
16.0	••	.0381	0344	735	80	••	.0592	+800*-	225	08	••	.0485	0216	625	62
39.5*	••	.0125	**00*	.476	00.	••	.0388	0075	116	-2.17	••	.0344	0075	-1.043	-3.15

4
-
4
0
-
0
VE
á
SE
8
90

----

•	Y.	001+00	70/110	70 /00						1 4		70,000	70/00	•	
! .		0014110	010701	20/110		00.4410	10/07	207110	١.	10	0014119	014/07	207110		!
••	3.6	4:1	02	18.72	.3 :	3.8	4.58	17.88		3.9	0.01	14.51	8.93	••	48.0
••	3.8	2.0	•15	17.90	3.5 :	0.4	4.77	16.80		4.0	10.3	14.71	8.37	••	32.0
••	4.1	5.5	*.	16.58	. 8.1		5.02	15.09		4.3	10.8	14.81	7.49	••	16.0
••	4.5	1.9	1.20	15.36	4.2 :	5.1	91.9	13.56		4.6	11.3	14.82	6.71	••	8.0
••	4.9	6.7	1.46	14.22	: 9.4		5.24	12.19		2.0	11.8	14.81	9.00	••	4.0
••	5.3	7.5	19.1	13.17	2.0 :		5.28	10.95		5.4	12.3	14.81	5.37	••	2.0
••	5.8	8.2	1.68	12.20	5.4 :		5.30	9.84		5.7	12.9	14.80	4.81	••	1.0
!	(DEG)	(DEG)	3	(M/S)	DEG) :	DEG) (C	(3)	(N/S)		(DEG)	(DEG)	3	(H/S)		HEIGHT (M)
••	\$16E	SIGA	TEMP	NS	SIGE :		TENP	MS		SIGE	SIGA	TEMP	S#	••	
												DATA	FITTED	ES	L'EAST SQUARES FITTED DATA
= !		• 05 4.6	•	345.	1	3.8	4.57	318.				14.	272.		48.
*	3.8:				3.5:					3.9:	73 10.3			••	32.
*			17.70	333. 17				15			0			••	16.
::										:6.4	~		273.	••	8.
••					••			311. 12.6						••	+
• ••		1.59 7.6	12.55	345. 12							14.90 13.0	5.41 14.	274.	• ••	2:
! .		70	-				5 21				7.8	14.7			1
	(DEG)	•	(M/S) (C)	_	••			EG) (M/S)	0):	(DEG): (DEG	-	(M/S) (C)	:(DEC)		HEIGHT (M)
	SIGE	MP SIGA	WS TEMP	Q.	SIGE :	SIGA	S TEMP	OM OM		SIGE	P SIGA	MS TEMP	Q	"	
**			( 8M)	160.1 (M+)	. 8866:	(164)	(8M).8961	4M) .9230	-	4		( 8M).	1644. (M4)	••	USTAR
:	_	07 (16M	(8M)	(4H)05		-	(8M)01	4M)01			.03 (16M)		(4H)	••	(1/1)*10
		COBSERVED	02	. 7		-		_		0	COBSERVED	-10	61		
		NW/CM2	89.88	144)		MW/CM2	/MH	00 - (M4		2	MW/CM2	1 187 10	1 447		NET RADIATION
••		P= .11	B=12	A=15		• • 15	=12 P=	A=17 B=	•		P= .16	-10	A=07 B=	••	EXPONENTS
••		H	GIH	LOW 1524		H	MID	30			IH 84	9 MID 304	LOW 1829	••	CLD HT (M)
••	TOTL 7	H		N 7 NO	10 :1	TOTL		OIM OI MO	::0	TOTL 10	_	01 01	:LOM 7	=	
•••				-		1/8	LY (MI)	-				ITY (MI)	VISIBILITY	•••	
•••		C -8-3		DEW POINT		-0-6	DEG C	DEW POINT			-8-3	POINT DEG C	DE M PO	••	
• ••		C 1el	TEMP DEG	16	• ••	6.7	TEMP DEG C	TEM			15.6	TEMP DEG C	-	• ••	
••	00:00		10/03/17	DATE 107	••	IF 17:00:00		DATE 09/03/17		16:00:00	IME 16:0	103/17	DATE 09/03/77	•• •	
!															

-.05

-.017

.3635 -.0587 .1962 -.0504 .1059 -.0337 .1286 -.0081

8555

-.004

.4351 -.0098 .2421 -.0087 .1347 -.0064 .1249 -.0044

....

.017 .046 .087

.2222 .0115 .1241 .0096 .0693 .0056

4.0 8.0 16.0 39.2\*

	:	DATE L		ATHE		E 12	2:0	0:00	
	:			DEG	-				
		DEW PO				-8.3			
	:	VISIB				1.5	1000		
CLD (TENTHS)	200	ON 10			HI			TL 1	
CLD HT (M)		LON L				H			
EXPONENTS	:	A=0	5 B=	0	5 P=	. 1	12		
NET RADIATION				32,66					
RICHARDSON NO.									
		(39.19							
(1/L)*10		(4M) -							
USTAR	:	(4M).89	932	( 8M )	.864	2 (	L6M	1.85	19
	-								
HEIGHT (M)		WD DEG)	WS (M/S			SIC			
neigni (m)	•	DEGI	( m/ 3			TUE	,, 		
1.	:				3.19				
2.	-	349.	10.2		2.93		9.4		
4.			11.7		2.61		2.2		
8.			13.0		2.34		3.4	4	.7
16.			14.1		1.89	,	7.9	4	.2
32.	:	333.	14.3	36	1.49	1	3.3	4	.0
48.	:	350.			1.18		3.0		.4
LEAST SQUARE	5	FITTED	DAT	A					
	:	WS		TEM		SIG		SIG	
HEIGHT (M)	:		)	TEM (C)		DEG		SIG	
	:	(M/S		(C)	(	DEG		DEG	)
1.0	:	(M/S	5	(C)		DEG:		5.0	)
1.0	:	9.70 10.6	5	3.00 2.91	(	9.7 9.3		5.0 4.8	)
1.0	: : : :	9.70 10.63	5 3 8	3.00 2.91 2.75		9.7 9.3 9.0		5.0 4.8 4.7	)
1.0 2.0 4.0 8.0	: : : : :	9.76 10.63 11.56	5 3 8	3.00 2.91 2.75 2.45	(	9.7 9.3 9.0 8.7		5.0 4.8 4.7	3
1.0 2.0 4.0 8.0 16.0	: : : : :	9.76 10.65 11.56 12.6 13.76	5 3 8 1	3.00 2.91 2.75 2.45 1.95		9.7 9.3 9.0 8.7 8.3		5.0 4.8 4.7 4.9	)
1.0 2.0 4.0 8.0 16.0 32.0	: : : : :	9.76 10.65 11.56 12.6 13.76 14.9	5 3 8 1 4	3.00 2.91 2.75 2.45 1.95		9.7 9.3 9.0 8.7 8.3		5.0 4.8 4.7 4.5 4.4	)
1.0 2.0 4.0 8.0 16.0	: : : : : :	9.76 10.65 11.56 12.6 13.76 14.9	5 3 8 1 4	3.00 2.91 2.75 2.45 1.95		9.7 9.3 9.0 8.7 8.3		5.0 4.8 4.7 4.9	)
1.0 2.0 4.0 8.0 16.0 32.0	: : : : : : : : : : : : : : : : : : : :	9.76 10.65 11.56 12.6 13.76 14.9	5 3 8 1 4 7	3.00 2.91 2.75 2.45 1.95 1.33 1.24	(	9.7 9.3 9.0 8.7 8.3 8.0 7.9		5.0 4.8 4.7 4.5 4.4	)
1.0 2.0 4.0 8.0 16.0 32.0	: : : : : : : : :	9.70 10.60 11.50 12.60 13.70 14.90 15.70	5 3 8 1 4 7 4	3.00 2.91 2.75 2.45 1.95 1.33 1.24	BU	9.7 9.3 9.0 8.7 8.3 8.0 7.9	) 	5.0 4.8 4.7 4.5 4.4 4.2 4.1	3
1.0 2.0 4.0 8.0 16.0 32.0 48.0	: : : : : : : : : : : : : : : : : : : :	9.76 10.66 11.56 12.66 13.76 14.97 15.76 0U/DZ	5 3 8 1 4 7 4	3.00 2.91 2.75 2.45 1.95 1.33 1.24	BU	9.7 9.3 9.0 8.7 8.3 8.0 7.9	0	5.0 4.8 4.7 4.9 4.4 4.2 4.1	3
1.0 2.0 4.0 8.0 16.0 32.0 48.0	: : : : : : : : : : : : : : : : : : : :	9.76 10.66 11.56 12.66 13.76 14.97 15.76	5 3 8 1 4 7 4 0	3.00 2.91 2.75 2.45 1.95 1.33 1.24 (H/DZ	BU	9.7 9.3 9.0 8.7 8.3 8.0 7.9	0	5.0 4.8 4.7 4.9 4.4 4.1 RI	33

CBSERVED DA	DATA																
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSGN NO.		DATE 11/0  TEM  DEW POIN  VISIBILI  LOW  A=13 B  (4M)11  (4M)13  (4M)33	3/77 8 A T T D E G T T D E G T T O E G T T O E G T T O E G T T O E G T T O E G T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O E T T O	1 ME N/C M/C 08S 08S 08S 0.43	10:00:00 1.1 -7.8 5 0 TOTL HI .13 M2 (16M)6 ERVED DAT (16M)6	0 0 0 4 T A 1 3 5 0 8	DATE  DEW  VISI  LOW  A=  (4M)  (4M)  (4M)	11/03/ WEA TEMP POINT BILITY BILITY MID 08 B= 36. 10 (1922)	TIME C C C C C B B P = M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M M / C M / C M M / C M M / C	10	9 A P 1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S 1 S 1	DATE DEW VIS LOW A= - (4M) (4M)	11/ TE POII 181L MM M 0.09	HER HER HI HI HI HI HI HI HI HI HI HI HI HI HI	ME 85	3.9 7.2 0 TOTL 0 HI 11 12 16M)65 RVED DATA) (16M)44	
HEIGHT (M)		: ND	WS T	TEMP (C)	SIGA DEG)	SIGE (DEG)	: MD	WS (M/S)	TEMP SI	SIGA SI	S1GE (DEG)	: WD	WS (M/S)	TEMP	P SIGA (DEG)	SIGE :	
1. 2. 4. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.		319. 308. 305. 320.	3.65 4.80 5.04 5.52	80 55 03 19 19 19 17 17	7.1 7.1 5.8 6.6	5.6	344 335 335 346 346	5.31 5.99 6.52 7.09	2.66	0.08 10.88 8.44 8.44	9 9 9	345- 335- 337- 332- 331- 344-	5.61 6.84 7.38 7.66	4.6.6.9.9.4	08 77 71 9.8 71 9.6 51 8.2 20 8.1 91 8.2	0.00	
		WS (M/S	TEMP (C)	-	SIGA DEG) (	SIGE DEG)	3 %	STS	EMP SIGA	-	SIGE DEG)	3	WS M/S1	TEMP	SIGA (DEG)	SIGE :	
0.0000000000000000000000000000000000000		3.54 3.88 4.26 4.07 5.13		0.88.6	98-486	5.2086	00000	2033	=====	4.0.0.0.0	0010801		.37 .79 .74 .28	3.73		4444 4000	
32.0		5.62 5.94 DU/02	267 471 0TH/02	98	5.9 *100	5.8 8.1	70/00	. 56 . 98 . 98 . 64 . 07H/0 ZO	8.8 8.8 8.5 8.5		982	7.8 8.2 8.2	5-1	1.92 2.02 DTH/DZ	8.2 7.9 8U*100	6.5 6.5	1
4.0 8.0 16.0 39.2*			0543 0454 0277 0025	1111	171 477 970 -1 424	06 31 1.27 51	.1656	60837 00396 00396	132	- 05	0.000	.1586	11111		-116 330 666	16	1 1

4
-
A
0
_
0
w
>
Q.
W
SE
8

20 :: 20 :: 20 :: 38 :: 4TA) :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :: -26 :	S1GE: (DEG): (DEG): (A.8: 4.9: 5.1:
C 6.7 C -11.1 ) 60 HI 1 TOTL 1 HI 7620 P= .12 MW/CM2 18(16M)3 (OBSERVED DAT	SIGA S (DEG) ( 00 9.9 9 9.3 2 8.4 6 6.6 7 6.9
TIME C C -1 (C -1 HI 60 HI MW/CM -18(	5.5670 (C) (D) 6.60 6.29 5.42 5.42 5.42 4.77
DATE 11/03/77 TIME 15:00:00 :  HEATHER  TEMP DEG C 6.7 :  VISIBILITY (MI) 60 :  LOW MID HI 1 TOTL 1 :  LOW MID HI 1 TOTL 1 :  A=13 8=01 P= .12 :  A=13 8=01 P= .12 :  C (4M)07 (8M)18(16M)38 :  A): (39.192M)21 (DBSERVED DATA) :  35: (4M)20 (8M)26 (16M)26 :	MS T MS T (M/S) ( 7.33 7.91 8.63 9.25
TE 11/ TE TE T	0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DATE OF THE CONTRACT OF THE CO	(4M) (DEG) (DEG) 358 348 348 345
00 L 0 L 0 DATA)	SIGE : WD (DEG):(DEG) : 358 : 348 : 348 : 5-1: 348 : 5-1: 343 : 6-0: 345
6.4 10.0 0 TOT HI (16M) (16M)	S1GA (DEG) (DEG) 7 9.7 7 9.5 10.0 9.4
TIME G C C C MI) 6 MI) 6 MI) 6 HI 6 P= 16 P= 16 P= 16 P= 16 P= 16 P= 16 P= 16 P= 16 P= 16 P= 17 P= 18	10.5594 (C) (C) (C) (C) (C) (C) (C) (C) (C) (C)
: DATE 11/03/77 TIME 14:00:00 : D.  HEATHER  TEMP DEG C 6.4 :  VISIBILITY (MI) 60 : (10.00)  LOW MID HI 0 TOTL 0 : LON  LOW MID HI 0 TOTL 0 : LON  A=01 B= .16 P= .11 : A  35.94 MW/CM2 : (4M)09 (8M)26(16M)52 : (4M)27 (8M)36 (16M)35 : (4M)35 (16M)35 (16M)35 : (4M)35 (16M)35 (16	6.37 7.16 7.75 8.32 8.75
DATE 11 DEW POW VISIBILITY LOW A=01 (4M)	(4M).5 BD DEG) 354. 345. 346. 346. 346. 346.
00 :- .96 :- .641	SIGE: WD (DEG): (DEG) : 354. : 345. 6.0: 346. 6.7: 339. 8.4: 340. 9.5: 352.
IME 13:00:00 : 5.6 : -7.8 : 30 : 10	SIGA S SIGA S (DEG) ( 11.3 11.3 11.3
TIME C C C LI) 30 HI 6 P= MW/CM C08SE	5.4845 (C) (D 5.39 5.04 4.57 4.63 3.79 3.43
DATE 11/03/77 TI  MEATHER  TEMP DEG C  DEW POINT DEG C  VISIBILITY (MI)  OM MID HI  LOM MID HI  COM MID HI  (40.26 PW  (4M)16 (8M)  (39.192M)26 (0  (4M)46 (8M)	1 1 2 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
H H K K	MD DEG) (N 347.5338.5340.653340.65336.755338.556.755735757575757575757575757575757575757
	: (4M) : (DEG) : 347 : 338 : 340 : 346 : 348
CLD (TENTHS) CLD HT (M) EXFONENTS NET RADIATION RICHARDSON ND.	USTAR HEIGHT (M) 1. 2. 4. 8. 16. 32. 48.
CLD (TENT CLD HT (M EXPONENTS NET RADIA RICHARDSO	LE 16

LEAST SQUARES FITTED DATA

	••	N	TEMP		SIGE		N.S.	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE	
HEIGHT (M)	••	(#/8)	(3)	(DEG)	(DEG)		(M/S)	3	(050)	(DEG)		(M/S)	53	(050)	(DEG)	
1.0		5.12	5.06	10.9	3.4		6.02	5.90	9.7	3.5		6.13		6.01	5.1	
2.0	••	5.48		11.0	4.1		15.9	5.80	7.6	3.9	••	6.67	6.23	6.6	2.0	
4.0	••	5.88		11.11	4.9	••	7.05	5.59	7.6	4.4	••	7.25		1.6	5.0	
8.0	••	6.30		11.3	5.9	••	7.62	5.21	9.6	6.4	••	7.89		8.3	2.0	
0.9	••	6.15		11.4	7.0	••	8.25	4.60	9.6	5.4	••	8.58		7.6	2.0	-
2.0	••	7.23		11.6	8.4	••	8.92	3.94	9.6	1.9	••	9.33		6.9	2.0	-
48.0	••	7.52		11.7	6.3	••	9.34	40.4	6.5	6.5	••	9.80		6.5	2.0	-
		20/00	DT H / 02	BU*100	۳ ا		Z0/N0	DTH/D2	BU*100	R.I		20/00	DTH/D2	BU*100	R.I.	1
4.0		.1352	0845	138	01		-1846 -	0876	099	05		. 2030 -	0765	082	03	
8.0	••	.0724	0699	399	24		- 8660 -	0727	282	13	••	+011.	0640	231	09	
0.91	••	.0388	80+0*-	812	77	••	.0540	0430	175	52		.0090.	0390	478	38	
19.5*	••	.0259	0050	511	+1		.0367	0062	418	53	••	.0342	6900	413	14	

-		••	••	••	3:	••	••	••	: 05	TA1:	: 66	:060	3E :	(DEG):		••	••	8.9:	10.5:	1.2:	1.4:
	TIME 12:30:00				DIL				70(16M)-1.50	(OBSERVED DATA)	94 (16M)99:	(4M).3037 (8M).3067 (16M).3090:				8	3				
	12:	2.0	0.01-	0	TOTL	Ħ	.11	M2	W91)	ERVE	(16	(16	SIGA	DEG		15.	14.	13.	11.3	11:	11.
	TIME			_	H		P=	MWICHZ	70	(085	+6	3067	TEMP SIGA	, (	.95	.62	91.	.25	37	.64	-92
	-	DEG C	DEG	(MI		OI	.14	43.54			8M)	8M) .					1		1	1	'
	103/ WEA	TEMP	INT	LITY	MID	1220 MID	-11 8=	43	24 (	1-IH	1 19	37 (	N.S.	W/S)		3.27	3.60	3.81	4.14	4.47	
	DATE 14/03/77 WEATHER	1	DEW PCINT DEG (	VISIBILITY (MI	3	12	11		(4M)24 (8M)	39.192M1-1.66	4M)67 (8M)	1.30									
	DAT		DE	1	MO7: 8	LOW	A=		W 4 )	(39	_		F	( DE G		357	346		340.		
		••	••	••	3:	••	••	••	28 :	TA):	. 85:	379:	GE :	(DEG): (DEG)		••	••	:6.9	7.3:	7.8:	8.7:
	TIME 11:00:00				OTL				60(16M)-1.28	(OBSERVED DATA)	- (W	M) . 3				8	9				9
	::	1:1	1.6-	2	1	Ħ	.11	M2	(16M	ERVE	(16	91)	SIGA	DEG		12.	12.	111.	9.6	6	6
		0	U	-	H		.12 P=	39.50 MW/CM2	60	(085	(4M)59 (8M)81 (16M)85:	3365	₩ ₩	(3)	.20	.05	.85	.37	-1.07	14.	09.
	03/77 WEATHER	DEG	DEG	IW)		OI	.12	. 50	841	. 20	8 M)	8 M).									7
	: DATE 14/03/77 : WEATHER	TEMP DEG	DEW POINT DEG	VISIBILITY (MI	3 MID	1220 MID	-10 8=	38	21 (84)	(39.192M) 20	29 (	150	MS	M/S)		3.55	4.15	4.26	4.63	4.90	
	'E 14		d M	SIBI						1.192		11.3		_		•		•		•	
	DA		. DE	>	5:LOW	LOW	- V :		(4M)				3	C DE		335	325		319.		
				ï	5	20			. 64	BSERVED DATA):	43	78 (164).4450:	SIGE : WD	(DEG):(DEG)				5.6:	6.4:	7.0:	8.13
	:00:	9	_		5 TOTL	7620	0			ED DI	- ( W 9	5M).			ì	10.2	9.6	0.	.5	.2	.7
	C1 3	•	1-9-	85	2	H	-	CM2	29(16M)	SERVI	0 (1	8 (1	516	(DEC)				6	1	-	7
	: DATE 14/03/77 TIME 10:00:00	ں	v	1	H		.20 P=	30.84 MW/CM2	2	9	4.1	1441	TEMP	(0)	83	1.08	1.72	-1.39	-1.97	-2.23	2.53
	03/77 WEATHER	DEG	DEG	Y CM		MID		0.84	( 8M)	45	( 8M)	( 8M)									•
	4/03	TEMP	DEM POINT DEG C	VISIBILITY (MI)	MID	1220 MID	A=11 B=	3	(4M)10 (8M)	(39.192M)45	(4M)29 (8M)	(4M).4557 (8M).44	N.S.	(M/S)		5.1	5.71	6.13	6.58	6.84	
	TE 1		EM P	11518	_				- ( W	61.6	- (W	M).4	Q.	(9)		355.	346.	. 9	.0.	.5.	3.
A	. 04	••		>		. LOM	. A=				. (4	. (4		: ( DEC )		: 35	: 34	: 34	: 340	: 34	: 35
CBSERVED DATA					181			ION	- NO.		01			HEIGHT (M)							
RVE					TENT	W)	ENTS	LCIAT	OSCI		(1/1)*10	USTAR		SHT	-	2.	4	8	16.	32.	48.
CBSE					CLD (TENTHS)	H O7	<b>EXPONENTS</b>	NET RACIATION	RICHAROSCN NO.:		3	US		HEI							
1					C	S	ш	Z	æ												

							4	-		1					
	••	SM	TEMP		SIGE	••	NS	TEMP	SIGA	SIGE	••	SM	TEMP		SIGE
HEIGHT (M)	••	(M/S)	(3)	(DEG)	(DEG)	••	(M/S)	(3)	(DEG)	(DEG)	••	(M/S)	(3)	(DEG)	(DEC)
1.0		4.90		11.0	3.7		3.41		13.9	5.3		3.05	19.	16.6	6.9
2.0	••	5.26	-1.16	10.2	4.2	••	3.67	15	13.0	5.7	••	3.29	.53	15.4	7.6
4.0	••	5.64		4.6	6.4	••	3.96		12.1	6.5	••	3.55	04.	14.2	8.3
8.0	••	6.05		8.7	5.6		4.27		11.3	8.9		3.84	.14	13.2	9.2
16.0	••	6.50		8.1	4.9	••	4.61		10.5	7.4	••	4.14	29	12.2	1001
32.0	••	16.9		7.5	7.3		4.97		9.8	8.0		4.47	80	11.3	111.1
48.0		7.26		7.1	7.9		61.6		4.6	8.4		4.67	86	10.8	11.7
		20/00	DTH/02	BU*100	R.I.		20/00	DTH/02	80*100	RI		20/00	DTH/02	BU#100	R.
4.0		.1328 -	0476	086	01		7660.	0577	211	03		- 7090.	0556	253	04
8.0		.07120404	+040*	255	14		.0537	0484	019	30		- 6840.	0468	730	35
16.0	••	-0382	0260	570	32	••	.0290	0299	-1.298	-1.68	••	. 0264 -	1620	-1.561	-2.24
39.5*		.0265	0088	984	-2.42		.0183	6100	410	14		-0128 -	0075	-1.992	-6.57

00:	1.43 : DATA) : 95 : .3249 : SIGE : (DEG) :	8.6: 9.4: 10.6:
C 3.5 C -13.3 ) 60 HI TOTL P= 11	(16M)- (16M) (16M) (16M) SIGA DEG)	19.4 19.4 18.0 15.6
HER GG C - MI) 6 HI 6 117 P=	1)65(16M) 38 (08SERVED 4)88 (16M) 4) -3228 (16M) TEMP SIGA (C) (0EG)	3.09 2.76 1.87 2.38 1.81 1.45
TEMP DEG C 3.5  TEMP DEG C 3.5  DEW POINT DEG C -13.3  VISIBILITY (MI) 60  4:LOW 4 MID HI TOT  LOW 1220 MID HI  A=08 B= .17 P= .11	(4M)22 (8M)65(16M)-1.43 (39.192M)-1.08 (OBSERVED DATA) (4M)63 (8M)88 (16M)95 (4M) .3209 (8M) .3228 (16M) .3249 MD WS TEMP SIGA SIGE DEG) (M/S) (C) (DEG) (DEG)	3.47 3.81 4.11 4.36 4.69
DEW P VISTB OW 4 LOW 1 A=0	(4M) - (4M) - (4M) -3 (4M) 0EG)	23. 14. 15. 9.
		9.7: 111.3: 11.8:
C 2.3 C -11.7 ) 60 HI HI MW/CM?	1-1.46(16M)-3.04 : (4M) 3 (OBSERVED DATA): (39. 1-1.94 (16M)-2.00: (4M) 1.2961 (16M).2932: (4M) TEMP SIGA SIGE : WD (C) (DEG) (DEG):(DEG)	23.5 23.4 23.5 20.0 16.3
MEATHER  WEATHER  EMP DEG C 2.3  INT DEG C -11.7  LITY (MI) 60  MID HI TC  20 MID HI TC  20 MID HI TC  36.63 MW/CM?	3 (08S 3 (08S 3-1.94 1.2961 TEMP (C) (	2.34 2.06 1.29 1.71 1.17 1.17
: DATE 14/03/77 TIME : WEATHER : TEMP DEG C : DEW POINT DEG C -1 : VISIBILITY (MI) 60 3:LOW 4 MID HI : LOW 1220 MID : A= -13 B= 19 P=	(4M)49 (8M)-1.46 (16M)-3.04: (39.192M)73 (OBSERVED DATA): (4M)-1.34 (8M)-1.94 (16M)-2.00: (4M).2930 (8M).2961 (16M).2932: WD WS TEMP SIGA SIGE: (DEG) (M/S) (C) (DEG) (DEG):	2.98 3.27 3.42 3.61
DEW POW VISIB OW 4 LOW 1:	(4M) - (39.19 (4M) - 1 (4M) - 2 WD DEG)	1. 354. 364. 344. 348.
<del>.</del>	2.32: (4M) DATA): (391.53: (4M) .2947: (4M) SIGE: WD (DEG): (DEG)	: 1. : 354. 9.8: 353. 10.8: 344. 12.9: 339.
2.3 -10.8 70 TOTL HI FOR TOTL	6M)- VED 16M) 16M) 6A	31.9 31.6 27.8 23.1
A T T T T T T T T T T T T T T T T T T T	(8M)-1.02 2.23 (DBS (8M)-1.36 (8M).2927 TEMP	1.64 1.45 .73 1.31 .54 .04
DATE 14/03/77 TIME 1  WEATHER  TEMP DEG C 2  DEW POINT DEG C -10  VISIBILITY (MI) 70  OM 3 MID HI  LOW 1220 MID H  A= -13 B= .20 P= .  42.78 MM/CM2	(4M)34 (8M)-1 (39.192M)-2.23 ( (4M)93 (8M)-1 (4M).2900 (8M).2 WD WS TEM DEG) (M/S) (C)	3.09 3.32 3.74 3.99
DATE 1.  DEW P  LOW 3  LOW 1.	(4M)34 (8M)-1. (39.192M)-2.23 ( (4M)93 (8M)-1. (4M).2900 (8M).2. WD WS TEM: (DEG) (M/S) (C)	334. 326. 327. 324. 340.
2	: " "   " "	
CLD (TENTHS) CLD HT (M) EXPGNENTS NFT RADIATION	(1/L)*10 USTAR HEIGHT (M)	1. 2. 4. 8. 32. 48.

_
TA
d
DA
TED
ш
-
FIT
Ξ
_
S
ARES
æ
2
Sau
-
AS

	••	MS	TEMP		SIGE	••	NS	TEMP		SIGE	••	SM	TEMF	SIGA	SIGE
HEIGHT (M)	••	(M/S)	3	(950)	(DEG)		(M/S)	(0)	(DEG)	(DEG)	••	(M/S)	(3)	(DEG)	(DEG)
1.0		2.91		37.3	4.9		2.88		27.8	6.5		3.26		21.2	0.9
2.0	••	3.10	1.36	34.2	7.4	••	3.04	96.1	25.3	7.4	••	3.51	2.65	20.1	6.8
4.0	••	3.30		31.3	8.5	••	3.21		23.1	8.5	••	3.78		19.1	7.6
8.0	••	3.51		28.7	7.6	••	3.39		21.1	4.1	••	4.07		181	8.5
0.91	••	3.74		26.3	11.1	••	3.58		19.3	11.0	••	4.38		17.2	9.6
32.0	••	3.98		24.1	12.7		3.78		17.6	12.6	••	4.71		16.3	10.7
48.0	••	4.13		22.9	13.8	••	3.91		16.7	13.6	••	4.92		15.8	11.5
		20/00	DTH/02	80*100	7		70/00	DTH/DZ	BU*100	۳. ت		70/00	0TH/02	BU*100	
4.0		. 0693	0457	240	08		.0587	0477	264	08		. 0920	0544	217	02
8.0	••	. 6980.	0388	719	28	••	.0310	0394	781	39	••	.0050	0459	633	33
16.0	••	. 1610.	0250	-1.638	-1.98	••	+910.	0228	-1.626	-1.52	••	.0269	0290	-1.383	-1.80
39.2*	••	0600	0050	-1.675	-4.40	••	1110.	0025	956	-1.93	••	. 0144	0062	-1.492	-4.34

	: DAT	DATE 14/03/77 TIME	MIT T	E 17:00:00	: 00:0	DATE	DATE 14/03/77 TIME 18:00:00	7 TIME	18:00	: 00:	DATE	14/03/17		TIME 19:00:00	00:0
		MEATHER	HER		•		WEATHER			•		WEATHE	HER		
		TEMP DEG C	LEG C	4.7			TEMP D	U	2.8			TEMP D		1.1	
	: DE	DEN POINT DEG	DEG C	-14.5		DEW	DEW POINT DEG	J	15.5		DEW	DEW POINT DEG C		-13.9	
	IV :	VISIBILITY (MI)	(MI)	10	•	VISI	VISIBILITY (MI	(MI) S	0	•	VIS	VISIBILITY (MI		20	
LD (TENTHS)	FLOW	2 MID	Ħ	TOT	TL 2:	LOW	3 MID	H	TOTL	3	*COM	3 MID	H	101	.1 3
CLD HT (M)	. Co.		0.	Ħ		HOT :	1524 MID	0	H		LOW	LOW 1524 MID	0	Ħ	
EXPONENTS	: A=	08 8=	.22 P=	.10	•	A= -	A=21 8= .02	.02 P=	60.		A= -		-39 P=	90.	
NET RADIATION		3	3.98 MW/C	CM2			-7-	26 MW/C	M2				17 MM /	CM2	
RICHARDSON NO.		(4M)45 (8M)-1.34(16M)-3.10	1M1-1.3	4( 16M)-	-3.10	( M+)	(4M)32 (8M)98(16M)-2.44	M)96	(16M)-	2.44		(4M) .06 (M4)		13(16M)-3.13	3.13
	: (39	(39.192M)-4.70 (DBSERVED DATA):	70 (08	SERVED	DATA):		(39.192M)-1.93 (OBSERVED DATA):	93 (085	ERVED	DATA		(39.192M)****		(OBSERVED DATA):	DATA
(1/1)*10	14 :	(4M)-1.23 (8M)-1.78	3M1-1.7	M911 8	(16M)-2.04:		(4M)88 (8M)-1.31 (16M)-1.61:	M)-1.31	(16M)	-1.61		(4M) .30 (M)	H 1	19 (16M)-2.06:	-2.06
USTAR	14) :	(4M).1796 (8M).1842	3M) . 184		(16M).1882:		(4M).2244 (8M).2267 (16M).2307:	M).2267	(H91)	.2307:		(4M).0865 (8M).0945 (16M).1147:	490 · IM	2 (16M)	.1147
	9	SM (	TEMP	SIGA	SIGE :	9	S.	TEMP	SIGA	SIGE	Q.		TEMP	SIGA	SIGE :
PETGHT (M)	: ( DEC )	15/W) 15	3	(050)	(DEG):(DEG)	(DEG)	(M/S)	(3)	(C) (DEG) (DEG):(DEG)	(DEG)	(050)	(N/S)	5	(C) (DEG)	(DEG):
-1.			3.00					3.10					2.40		
2.	54 :		2.70			31.	2.36	16.2	14.8	•	78.	1.20	2.38		
.,	: 43		2.14	24.2	••	23.	2.60	2.24	13.4	•	68.	1.33	2.03		
.8	: 48.	1. 2.15	2.64			25.	2.77	2.72	12.6	9.8	. 72.	1.35	2.32	13.0	8.8
16.	: 39		2.13	21.0	15.1:		2.96	2.35	7.8	10.33		1.39	2.18		11.4
32.	. 40		1.89	18.8	16.91		3.02	2.04	7.3	6.6		1.44	1.96		13.2:
07															

	••	MS			SIGE		MS	TEM		SIGE	••	MS			SIGE
HEIGHT (M)	••	(M/S)	(3)	(DEG)	(DEG)		(M/S)	3	(DEG)	(DEG)	••	(N/S)	3	(050)	(DEG)
1.0		1.72		27.3	9.0		2.27		17.1	9.6		1.18			3.8
2.0	••	1.85		25.9	10.4	••	2.41		14.8	7.6	••	1.23			5.0
0.4	••	1.99		24.5	15.1	••	2.57		12.9	9.8	••	1.29			9.9
8.0	••	2.13		23.2	14.1	••	2.73		11.2	6.6	••	1.34			8.6
16.0	••	2.29		51.9	16.4	••	2.91		1.6	10.0	••	1.40			11.3
32.0	••	2.46	1.82	20.7	19.0	••	3.09	1.98	8.4	10.2	••	1.45	96.1 5	12.3	14.8
48.0	••	2.57		20.1	20.8		3.21		7.7	10.2	••	1.49			17.3
		20/00	DU/DZ 0TH/DZ	BU*100	2.		20/00	DTH/D2	BU*100	R.		20/00	DTH/D2	BU*100	<u>~</u>
4.0		.0476	.0476 0287	414	12		.0533	0256	221	08		.0175	.0005	•10.	00.
8.0	••	.0256	0246	-1.230	18	••	.0284	0223	679	24	••	1600.	0003	038	02
0.91	••	.0137	+910	-2.844	-5.00	••	1910.	0156	-1.686	-2.04	••	.0048	0020	930	67
39.2*	••	6900	0063		-30.11	••	.0118	0075	-4.258	-28.16	••	. 0031	0056	-14.405	.82.95

\* OBSERVED DATA

•	۹	ı
٠		
•	į	į
2		3
C		3
1	į	j
3	,	į
C	١	•
-	7	1
9		
	ī	

TEMP DEG C -16.1   TOTAL DEW POINT DEG C -16.1   TOTAL DEG CC -16.1   TOTAL DEG CC -16.1   TOTAL DEG C	TEMP VISIBILIT LOW MID LOW MID CAM A O.: (4M) A (4M) 6.88 (4M) 6.88 (4M) 6.88 (4M) 6.88 (4M) 6.88 (4M) 6.88	8		014	WEATHE TEMP DEG DINT DEG ILITY (M MID MID 6 B =3	c -6. c -16. J 25		DE	T.	THER DEG C		
TEMP DEG C -14.4 : DEW POINT DEG C -16.1 : DEW POINT DEG C -15.6 : USISILITY (MI) 25 :	TEMP  USIBILIT  LOW MID  LOW AD  A=05 B=  A=05 B=  (4M) .40  (4M) .40  (4M) 6.88  (4M) 6.88  (4M) 0645  MD WS  COEG (M/S)	EG C -0.9 EG C -14.4 (MI) 25 HI T 37 P= .26 37 P= .26 37 P= .26 37 P= .26 10.90(16M) 20.1085 FVE		014	TEMP DEG OINT DEG ILITY (M MID MID 6 B=3	6. C -16. J 25		: DE	TE	DEG C		•
: DEW POINT DEG C -14.4 : DEW POINT DEG C -16.1 : DEW POINT DEG C -15.6 : VISIBILITY (MI) 25	: DEW POINT : VISIBILIT : LOM MID : LOM NID : A=05 B= N : (4M) .40 : (39.192M) : (4M) 6.88 : (4M) 0645 : WD WS	EG C -14.4  (MI) 25  HI T  37 P= .26  37 NW/CM2  41 .90(16M  22 (OBSERVE  41 16.45 (16		014	OINT DEG ILITY (M MID MID 6 B=3	C -16.	-	: DE	******		1.9-	•
USBILLITY (MI) 25   VISIBILLITY (MI) 25   VISIBILLITY (MI) 25   USBILLITY (MI) 25	: VISIBILIT : LOM MID : LOM ND : A=05 B= N : (4M) .40 : (39.192M) : (4M) 6.88 : (4M) .0645 : MD WS : (4M) .0645	(MI) 25 HI HI -37 P= .26 07 MW/CM2 10 .90(16M 10 .45 (16M)		014	ILITY (M MID MID 6 B=3	) 25 HI		: VI	POINT	- 3 930	15.6	
CDM	: LOM MID : LOM	HI H		A B B B B B B B B B B B B B B B B B B B	MID MID 6 B=3 -8.72	H			SIBILITY	(MI) 2	2	
COM	. LOW . A=05 B= N : (4M) .40 (39.192M) (4M) 6.88 : (4M) .0645 . MD WS	37 P= .26 07 MW/CM2 07 MW/CM2 10 .90(16M 02 (OBSERVE 116.45 (16		A= A= (44)	MID 6 8=3 -8.72	*:-		"LOW	MIO	H	4 TOTL	*
A =05 B = .37 P = .26	N: A=05 B= 0.: (4M) .40 : (39.192M) : (4M) 6.88 : (4M) .0645 : MD WS : (DEG) (M/S	.37 P= .26 07 MW/CM2 1) .90(16M 02 (0BSERVE 1) 16.45 (16		A= (4M) (4M) (4M) (4M)	6 B=3 -8.72	H		FOM :	Σ	01	HI 762	0
N: -9.07 MW/CM2 : -8.72 MW/CM2 : -7.95 MW/CM2   -7.	N: (4M) .40 : (39.192M) : (4M) 6.88 : (4M) .0645 : WD WS	07 MW/CM2 4) .90(16M 02 (0BSERVE 4)16.45 (16		4 6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	-8.72	9. =d 0	1	: A=	09 B=	48 P=	.45	
(4M) .40 (8M) .90(16M) 1.39 : (4M) .36 (8M) .50(16M) .50 : (4M) .31 (8M) .59(16M) .91 (39.192M) .37 (0BSERVED DATA): (39.192M) .01 (0BSERVED DATA): (39.192M) .37 (0BSERVED DATA): (39.192M) .02 (0BSERVED DATA): (39.192M) .37 (0BSERVED DATA): (4M) 6.88 (8M)16.45 (16M)19.07: (4M) 5.62 (8M) 5.32 (16M) 2.64: (4M) 4.49 (8M) 7.37 (16M) 8.  (4M) 6.88 (8M)16.45 (16M)19.07: (4M) 5.62 (8M) 5.32 (16M) 2.64: (4M) 4.49 (8M) 7.37 (16M) 8.  (4M) 6.88 (8M)16.45 (16M)19.07: (4M) 5.62 (8M) 5.32 (16M) 2.64: (4M) 6.577 (8M) 7.37 (16M) 8.  (5M) 6.45 (8M) 6.45 (16M) 6.36: (16M) 6.30 (16M)	: (4M) .40 : (39.192M) : (4M) 6.88 : (4M) .0645 : WD WS	02 (OBSERVE 4) 16.45 (16		14. 14. 14. 14. 14. 14. 14. 14. 14. 14.		MW/CM2		••	1-	.95 MW/C	M2	
: (4M) 6.88 (8M) 16.45 (16M) 19.07: (4M) 5.62 (8M) 5.32 (16M) 2.64: (4M) 4.49 (8M) 7.37 (16M) 8.  : (4M) 6.88 (8M) 16.45 (16M) 19.07: (4M) 5.62 (8M) 5.32 (16M) 2.64: (4M) 4.49 (8M) 7.37 (16M) 8.  : (4M) 6.88 (8M) 16.45 (16M) 19.07: (4M) 6.62 (8M) 5.32 (16M) 2.64: (4M) 4.49 (8M) 7.37 (16M) 8.  : (4M) 6.88 (8M) 16.45 (16M) 19.07: (4M) 6.63 (16M) 6.32 (16M) 6.32 (16M) 6.32 (16M) 6.32 (16M) 6.34 (16M) 6.32 (16M) 6.32 (16M) 6.34 (16M) 6.32 (16M) 6.32 (16M) 6.34 (	: (39.192M) : (4M) 6.88 : (4M) .0645 : WD WS	02 (OBSERVE 4)16.45 (16		(44) (44)	.36 (8M)	.50(16	M) .50	. (4M	1 18.	8M) .59	( 16M)	94
: (4M) 6.88 (8M)16.45 (16M)19.07: (4M) 5.62 (8M) 5.32 (16M) 2.64: (4M) 4.49 (8M) 7.37 (16M) 8.  : (4M) .0645 (8M) .0435 (16M) .0365: (4M) .0363 (8M) .0434 (16M) .0632: (4M) .0577 (8M) .0518 (16M) .0435 (16M) .0434 (16M) .0645 (16M) .05518 (16M) .0434 (16M) .0645 (16M) .0434 (16M) .0434 (16M) .0434 (16M) .0565 (16EG)	: (4M) 6.88 : (4M) .0645 : MD WS :(DEG) (M/S	4) 16.45 (16		( N T)	10. (MZ		ED DATA!		192M1	.37 (OBS	ERVED DA	TAI
: (4M).0645 (8M).0435 (16M).0365: (4M).0363 (8M).0434 (16M).0632: (4M).0577 (8M).0518 (16M).0431 (16M).0431 (16M).0434 (16M).0632: (4M).0577 (8M).0518 (16M).0431 (16M).0434 (16M).0545 (16M).0548 (16	: (4M).0645 : WD WS :(DEG) (M/S	411 6435 116		( M4)	.62 (8M)		6M) 2.64		1 64.4	8M) 7.37	(16M) B	. 84
: WD WS TEMP SIGA SIGE: WD WS TEMP SIGA SIGE: WD WS TEMP SIGA SIGA SIGE: WD WS TEMP SIGA SIGA SIGA SIGA SIGA SIGA SIGA SIGA	: WD WS : (DEG) (M/S)	21 66 50 11			1363 (8M)	.0434 (1	6M1.0632			8M) .0518	(16M)	1640
: 72. 1.4061 4.8 : 7661 -1.55 .1 : 171. 1.03 -5.31 4.4 : 68. 2.20 1.34 3.2 : 52. 1.12 .23 6.0 : 162. 1.59 -4.00 3.9 : 73. 2.63 .81 2.2 .5: 47. 1.6341 4.5 .9: 154. 2.17 -4.68 6.2 : 66. 2.97 1.63 3.1 .6: 42. 3.20 1.66 3.0 .4: 112. 3.37 -1.97 4.6 : 66. 2.97 1.63 3.6 .9: 59. 59. 1.56 2.7 .6: 10802 3.5	:(DEG) (M/S)		!			•		9			!	GE :
:       -1.05       :       -2.76       :       -5.80         :       72.       1.40      61       4.6       -1.55       .1       :       171.       1.03       -5.31       4.4         :       68.       2.20       1.34       3.2       :       52.       1.12       -2.3       6.0       :       162.       1.59       -4.00       3.9         :       73.       2.63       .81       2.7       -41       4.5       .91       154.       2.17       -4.68       6.2       1.5       1.5       1.5       2.7       -7:       131.       3.37       -1.97       4.6       3.0       -6.       1.97       4.6       3.0       -4:       112.       3.37       -1.97       4.6       3.0       -4:       112.       3.37       -1.97       4.6       3.0       -4:       112.       3.37       -9.4       3.0       3.5       -9.4       3.0       -4:       112.       3.37       -9.4       3.0       -9.4       3.0       -9.7       -9.4       3.0       -9.5       9.5       9.5       1.56       2.7       -6:       108.       -9.4       3.0       -9.4       3.0       -9.4       3.				74.	Lie i			: ( DEG	1			EG) :
: 72.       1.40      61       4.8       : 76.       .61       -1.55       .1       : 111.       1.03       -5.31       4.4         : 68.       2.20       1.34       3.2       : 52.       1.12       .23       6.0       : 162.       1.59       -4.00       3.9         : 73.       2.63       .81       2.2       .5:       47.       1.63       -41       4.5       .9:       154.       2.17       -4.68       6.2       1         : 66.       2.93       1.65       3.6       .5:       3.20       1.66       3.0       .4:       112.       3.37       -1.97       4.6         : 66.       2.97       1.63       3.1       .6:       42.       3.20       1.66       3.0       .4:       112.       3.37       -94       3.0         : 81.       1.45       3.6       .9:       59.       1.56       2.7       .6:       108.       .5       3.5	1. : -1	-1.05				2.76				-5.80		
: 68. 2.20 1.34 3.2       : 52. 1.12 .23 6.0       : 162. 1.59 -4.00 3.9         : 73. 2.63 .81 2.2 .5: 47. 1.6341 4.5 .9: 154. 2.17 -4.68 6.2 1         : 66. 2.93 1.65 3.6 .5: 39. 2.88 1.50 2.7 .7: 131. 3.37 -1.97 4.6         : 66. 2.97 1.63 3.1 .6: 42. 3.20 1.66 3.0 .4: 112. 3.3794 3.0         : 81. 1.45 3.6 .9: 59. 1.56 2.7 .6: 108.	1.40	61 4.		76.	- 19.		1.	: 171,			4.4	
: 73. 2.63 .81 2.2 .5: 47. 1.6341 4.5 .9: 154. 2.17 -4.68 6.2 1 : 66. 2.93 1.65 3.6 .5: 39. 2.88 1.50 2.7 .7: 131. 3.37 -1.97 4.6 : 66. 2.97 1.63 3.1 .6: 42. 3.20 1.66 3.0 .4: 112. 3.3794 3.0 : 81. 1.45 3.6 .9: 59. 1.56 2.7 .6: 10802 3.5	2.20	1.34 3.	. 2	52.	1.12			: 162.			3.9	•
: 66. 2.93 1.65 3.6 .5: 39. 2.88 1.50 2.7 .7: 131. 3.37 -1.97 4.6 : 66. 2.97 1.63 3.1 .6: 42. 3.20 1.66 3.0 .4: 112. 3.3794 3.0 : 81. 1.45 3.6 .9: 59. 1.56 2.7 .6: 10802 3.5	. : 73.	.81 2.	2 .5:	47.	1.63						6.2	1.4
: 66. 2.97 1.63 3.1 .6: 42. 3.20 1.66 3.0 .4: 112. 3.3794 3.0 . 81. 1.45 3.6 .9: 59. 1.56 2.7 .6: 10802 3.5	. 99 :	1.65 3.	.5. 9	39.	2.88						4.6	. 8
: 81. 1.45 3.6 .9: 59. 1.56 2.7 .6: 10802 3.5	: 66. 2.97 1	1.63 3.	:9. 1	42.	3.20						3.0	9.
		1.45 3.	:6. 9	.65						.02	3.5	.6

•
ATAC
C
c
•
-
_
1
•
v
•
COLLARION
=
-
≍
u
v
_
۰
4
-

		MS	TEMP	*	SIGE	••	N	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE
HEIGHT (M)		(M/S)	3	=	(DEG)	••	(M/S)	(3)		(DEG)	••	(M/S)	3	-	(DEG)
0.1		1.37	33	3.7	.2		44.		.5	1.5		.82	-5.48	5.2	3.5
2.0		1.64	17	3.6	.2	••	.68	-1.50	8.	1.2	••	1.12	-5.25	4.9	5.5
4.0	••	1.96	+1.	3.5	.3	••	1.04	•	1.2	1.0	••	1.53	-4.79	4.5	1.8
8.0		2.34	69.	3.4	4.	••	1.59		8.1	8.	••	2.10	-3.95	4.3	1.3
16.0		2.80	1.52	3.3	.5	••	2.44		5.6		••	2.86	-2.51	4.0	6.
32.0		3.35	2.10	3.2	1.	••	3.73		3.8	.5	••	3.91	63	3.7	
48.0		3.72	1.26	3.1	8.	••	4.79		4.8	• •	••	4.70	07	3.6	.5
		20/00	. –	BU*100	R. I.		20/00	DTH/02	80*100	n I		20/00	DTH/DZ	BU*100	2
4.0		.1175	.1526	2.283	00.		.1522	.2286	12.162	00.		.1622	.2264	5.626	00.
8.0		.0703	.1247	5.208	00.	••	.1165	+681.	17.146	00.	••	8011.	.2004	10.636	00.
16.0	••	.0450	0690.	8.028	00.	••	.0892	1111.	17.082	00.	••	.0757	.1484	16.788	00.
39.5*		. 6950	0013	626	-1.26	••	*660*	.0037	1.340	00.	••	.0828	.0700	24.572	00.

	. DAT	: DATE 14/03/77 TIME 23:00:00	MIT TT	E 23:00	: 00:0	DATE	DATE 15/03/77 TIME 03:00:00	7 TIME	00:00		DATE	15/03/	: DATE 15/03/77 TIME 01:00:00	DO: 10 3	:00:
		WEA	WEATHER		••		WEATHER	HER				WEA	WEATHER		•
		TEMP DEG C		4.4-	••		TEMP D		-3.3			TEMP	DEG C	-5.5	•
	: DE	DEM POINT DEG	u	-111.7		DEW	DEW POINT DEG C		-11.2		DEW	POINT	DEG C	-12.8	
	: VI	VISIBILITY (MI	_	20	••	VISI	VISIBILITY (MI)		0.	••	VIS	IBILITY	CHI	20	
(TENTHS)	*C7:	MID	H	5 101	TL 5:	LOW	OIM	Ŧ	7 TOTL	1:1	LOW	IH OIM MO.	H	6 TOTL	1. 61
CLD HT (M)	. LOM		MID	H	1620 :	LOW	IW	0	HI 7	. 079	LOW	Z	01	H	,620
EXPONENTS	: A=	A=17 8=24 P=	24 P=	.35	••	A=	37 8= -	=d 96.	.52	••	A= -	.31 8=	21 Pa	.42	
NET RADIATION	••	-1	.26 MW/	CM2			-7-	26 MW/C	M2	•		-1	.26 MM/	CM2	
RICHARDSON NO.		01.	8M) .2	2(16M)	: 55.	( M+)	.11 (8	N) .19	(H91)	.32 :	( * W )	.38 (	F. (M8	(H91)1	1.02
		.192M) 1	.15 (08	SERVED	DATAL	(39.1	92M1 1.	78 (085	ERVED	DATA):	(39.	192M)	116 (08	SERVED	DATA
(1/1)*10	# (4H	1) 51.1 (MB) 65. (MA) :	8M) 1.1	S (16M)	2.13:	(H)	.70 (8	96. (M	(16M)	1.14:	( H + )	6.26	8M) 10.3	[W91) SI	10.40
USTAR	. (4N	(4M).1507 (8M).13	8M).136	17 (16M)	.1196:	(4M).	67 (16M).1196: (4M).0897 (8M).0993 (16M).1074: (4M).0518 (8M).0449 (16M).0451:	M) . 099	(16M)	.1074:	( 4 H )	.0518	8M) . 044	19 (16M)	.0451
	Q¥	S.M.	TEMP		SIGE:	Q.	N.S.		SIGA	SIGE :	9		WS TEMP SIGA		SIGE
HEIGHT (M)	: ( DEC )	( W/S)		(DEG) (DEG):(DEG)	(DEG):	(DEG)	(M/S)		(C) (DEG) (DEG):(DEG)	(DEG) :	(DEG)		(0)		(DEG)
1.			-4.68					-5.86					-6.99		
2.	: 144	. 2.05			••	132.	1.12	-5.56		••	104.	1.11			
4.	: 132				••	117.	1.71	-4.35	8.7	••		1.57			
8.	: 127	. 3.41	-3.98	1.8	3.6:	107.	2.30	-5.04	7:1	2.3:	106.	2.13	-5.93	1 4.3	1.9
16.	: 117				3.8:	97.	2.86	-3.85	5.4	3.6:		2.65			1.9
32.	+01 :				3.6:	91.	5.28	-2.96	3.5	1:1:		3.70			1.2:
48.	108		63		2.1:	98		-1.96	3.0	: 4:			-2.26		1.5

LEAST SQUARES FITTED DATA	RES	FITTED	DATA													
HEIGHT (M)		MS (M/S)	TEMP (C)	\$16A (DEG)	\$16E (DEG)		WS (W/S)	TEMP (C)	S1GA (DEG)	S16E (DEG)		WS (W/S)	TENP (C)	\$ \$16A (DEG)	\$16E (DEG)	
1.0	"	1.61	!	-	6.7		.78	-5.49	13.5	26.1		.85	-6.50	8.8	3.0	
2.0	••	2.06			5.7	••	1.12	-5.38	10.5	13.4	••	1.14	-6.25	7.1	5.6	••
4.0	••	2.64			4.8	••	19.1	-5.16	8.1	6.9	••	1.53	-5.77	5.7	2.2	••
8.0	••	3.37			4.0	••	2.32	-4.74	6.2	3.6	••	2.05	-4.89	4.6	1.9	••
16.0	••	4.31			3.4	••	3.32	-3.99	4.8	1.8	••	2.75	-3.48	3.7	1.1	••
32.0	••	5.50			5.9	••	4.77	-2.79	3.7	6.	••	3.69	-2.00	3.0	1:4	••
48.0	••	6.35	69	5.4	5.6	••	5.89	-2.02	3.2	9.	••	4.38	-2.33	2.7	1.3	••
		20/00	DTH/02	BU* 100	R.1		20/00	DTH/02	BU*100	- W	-	20/00	OTH/02	BU+100	2	! "
4.0		.2178	.1250	1.049	00.	-	.1986	.1160	2.608	00.		.1517	.2365	5.919	00.	! "
8.0	••	.1392	11157	2.372	00.	••	.1426	1101.	969.4	00.	••	1101.	2102.	11.169	00.	••
16.0	••	0680.	0760.	4.854	00.	••	1023	2160.	7.698	00.	••	.0682	.1305	16.041	00.	••
39.5*	••	.0483	++10.		00.		.0384	.0725	13.060	00.		.0424	1800.	2.814	00.	••
0 *	BSER	* OBSERVED DATA	4													!

<	
۰	
2	į
C	
_	
4	
٥	
U	į
₫	

	. DATE	DATE 15/03/77	Ξ	ME 02:00:00		DATE	: DATE 15/03/77	7 TIME	TIME 03:00:00		: DATE	: DATE 15/03/77 TIME 04:00:00	77 TIP	E 04:00	: 00:
		MEA	WEATHER		••		WEAT	HER				MEA	WEATHER		•
	••	TEMP DEG C		-5.5	•		TEMP DI	EG C	-5.0			TEMP	DEG C	-5.5	••
	. DEM	DEM POINT DEG	J	-13.3	•	DEW	POINT D	EG C -	12.8		BEN :	POINT	DEG C	-12.8	
	: VIS	VISIBILITY	(HI)	20	•	VISI	BILITY	(MI) 2	00		SIA :	IBILITY	CHI	20	•
HS)	*COM	MID	H	9 TOTL		LOW	MID	H	9 TOTL		HON	OIN	IH	7 101	1.
-	FOM :	I	MID	HI 6	96	LOW	H	0	9 11	66	FON :	-	10	HI	: 560
EXPONENTS	: A= -	32 8=12 P=	12 P=	14.		A=	58 8= -	.87 P=	14.		: A= -	.01 B=	.37 P=	04.	•
NET RADIATION		-5	-5.09 MW/	/CM2	••		-7-	26 MW/C	M2			-1	.26 MW/	CM2	•
RICHARDSON NO.	( 4M)	•16	•	W9	. 48 .	( 4H)	.17 (8	M) .35	(16M)	.72	( 4M)	.20 (	8M) .4	1(164)	. 17.
		39.192M)	-	SERVED	DATA):	(39.1	92M1 9.	37 (085	ERVED	ATA	1 (39.	192M)	.50 (08	SERVED	DATA!
(1/1)*10	(4M)	_	2	(16M)	2.49:	( M+)	1.55 (8	M) 2.79	(164)	5.2	(4H)	2.05	8M) 3.7	1 (16M)	5.15:
	: (4M)		Ē.	062 (16M).1091:	.1001:	(4M).	1: (4M).0639 (8M).0602 (16M).	M).0602	1).0602 (16M).0526:	052	1 (4H)	6: (4M).0949 (8M).0833 (16M).0758:	8M1.083	1 116MI	.0758
	9	SH	TEMP	SIGA	SIGE :	9	SM	TEMP	!	SIGE	9	HS	TEMP	SIGA	SIGE
HEIGHT (M)	: ( DEG )	(N/S)	(3)	(DEC)	(DEG):(DEG)	( DEC )	(M/S)	(C) (DEG)		(DEG): (DEG)	( DEG )	(M/S)		(C) (DEG)	(DEG)
			-8.90					-7.87	1				-6.53		ï
	: 177.	1.54	100	4.5	••	148.	86.	-7.37	35.3		12.	1.50	-6.27		•
	: 167.	2.32		3.6	••	136.	1.38	-6.49	29.5			2.11			•
	: 153.	2.73		3.8	.7:	130.	1.64	-6.78	20.7	4.3		2.99			1:1
	: 139.	3.99	-4.96	5.5	.6.	113.	2.30	-6.00	12.1	4.2:	.16 :	3.33		5.7	2.8:
	131.	00.9	-3.05	2.3	:9.	112.	3.93	-4.86	7.6	1.7		4.82			1.9
	: 142.		-1.93	1.2	:9.	132.		-3.25	4.0	6.					2.5

LEAST SQUARES FITTED DATA

HEIGHT (M)		(M/S)	3	(DEG)	(DEG)		(N/S)	3	(DEG)	(DEG)		(M/S)	(C)	(DEG)	(DEG)	w -
1.0		1.12	!	6.7	1.0		.68	-7.39	60.2	33.1		1.18	-6.27	4.3	9.	
2.0	••	1.55		5.3	6.	••	*6*	-7.30	40.3	181	••	1.56	-6.05	4.3	.8	
4.0		2.15		4.3	8.	••	1.31	-7.12	27.0	6.6	••	2.07	-5.63	4.2	1:1	
8.0	••	2.98		3.4		••	1.82	-6.76	181	5.4	••	2.73	-4.85	4.2	1.4	
16.0		4.12	-5.17	2.8		••	2.53	-6.05	12.1	5.9	••	3.61	-3.51	4.2	1.8	
32.0		5.71		2.2	9.	••	3.52	-4.66	8.1	1.6	••	4.17	-1.71	4.2	2.3	
48.0		6.92		2.0	9.		4.26	-3.33	4.9	1:1	••	29.6	-1.08	1:4	5.6	
		20/00	DT H/ DZ	80*100	RI		20/00	DTH/DZ	BU*100	RI		20/00	DTH/D2	80*100	2	•
4.0	-	.2377	.2499	3.201	00.	-	.1463	.1005	3.446	00.		.1947	.2100	2.884	.00	1
8.0		1491.	.2240	5.954	00.	••	9101.	-0995	7.058	00.	••	.1287	.1870	5.861	.00	
16.0	••	11111	1771	9.473	00.	••	90100	+160.	14.287	00.	••	.0851	01410	10.066	00.	
39.5*	••	.0573	.0800	10.823	00.	••	.0207	9011.	37.198	00.	••	6640.	.0344	7.097	00.	

		-		יושב ס	20.00.00		DAIE 1	1 1 10 10 1	747	00.00.00			DAIE 13	11 100 101	1		00:00:10
	••		WEATHER	,				WEATHER	~				•	WEATHER			
		DEN PO	DEW POINT DEG C		12.8	• ••	DEW P	POINT DEG	٠.	-13.3			DEW POINT	20	0	-12.2	
SHING LIENTHS	_	. VISIBII	MID (#	-	TOT		7	MID AND	07 IH	2 TOT!	٤ .	. :	191514		2 HI	8 7071	Tt. 10
			MID		-	95	LOW	MID	4570		56		*	110		Ŧ	20
EX PONE NTS	••	•	59. =8 60	. P=	30	••	A= .0	2 8=	0	58		. A=	16 =		55	25	
NET RADIATION	NO			X X		••		,			-	••			I	MW/CM2	-
RICHARDSON NO	ON	(4M)	-			1.15 :	-	8			1.79			34 (8M)		. 56 ( 16M )	87.
01*11/17	•• ••	(4M) 3.51	F1 (8M)	R 20		13.19:	441 B	8-24 (BM)	M120-21 (16M	(16M)	(16M)31-24		4M) 5.		- 0	3 (16M)	-
USTAR	• ••		(8M)	9 00	3 (16M).0596	.9650		. &	M).0511	(H91)	(16M).0387		4M1.0500				
	-	Q.M	MS T	TEMP SI	SIGAS	\$16E :	G.	T SM	TEMP S	SIGA	SIGE		0.1	MS	TEMP	SIGA	SIGE
HEISHT (M)		_	-	-		-	0	15	~		(DEG)	0:		(N/S)	133	(050)	(066)
1			-	-6.37	-				6.46						-8.41		
2.	••	128.	1.93 -	-6.04	1.9	••	127.	.75	-6.21	5.3				1.08	-8.21		
;	••		_	-3.48	4.7	••	117.		84.4-	1.4				1.35	-7.19		
.8	••			-5.26	2.8	1.0:			-5.80	5.4	1.3			1.69	16.1-	53	
.91	• •		4.32 -	-2.24	3.9	1.4:	121.		1.49	3.9	.0.			2.86	14.45		15.9
32.		151		+1.1-		2 2 2					2.0		125.	16.1	05-1-		
LEAST SOU	SQUARES	FITTED DATA	DATA														
-		s.	TEMP	P SIGA		\$16E :	SA	TEMP	-	SIGA	SIGE		S#	TE	TEMP	SIGA	SIGE
HEIGHT (M)		(M/S)	3	-	-	DEG1 :	(M/S)	2	-	-	DEG)		(M/S)	2	-	DEGI	(DEG)
1.0	-	1.74	-5.89	4.0		. 2.	1.66	'		6	.5		.65	-			4.64
2.0	••	2.14	-5.63	4.3		. 4.	2.0			0	9.		.95		-	109.2	31.5
4.0	••	2.63	-5.13	4.6		. 9.	2.46			0		••	1.39				1.02
8.0	••	3.22	'			. 6.	2.9	4-		-	6.		2.03	-6.62		28.4	12.8
16.0	•••	3.96	-2		-,	**	3.6	-2	4.4	٠,			2.96			5.	
48.0	• •	5.48	- 76	2.8	, ,	, 6	4.97	7 1		. 2.	1.5		5.40	-	34	5.0	4.0
	1.	00/02	DTH/DZ	80*100	8	R. I. S.	20/00	H	80	00	1 -		ZQ/NQ	DTH	1	80*100	18
4.0	1.	1181	.2461	2.089	1	. 00	1619	.3128	3.039	6	00	1.	1796	. 2960	1	9.022	00
8.0	••	11112	.2135	4.790		. 00	9860		66.9	9	00		1310	.2625	-	14.964	00
16.0	•	.0683	.1485	8.782		: 00	0090		12.474	*	00	••	9560	1954		20.780	00
39.2*	••	0770	0000	200			2000						1000	2000		000	

OBSERVED DATA	4															
	: 04	: DATE 15/03/77	-	IME 05:00:00	14	: DAT	: DATE 15/03/77 TIME 06:00:00	MIT TY	E 06:00	: 00:0	DATE	DATE 15/03/77		TIME 07:00:00	00:0	**
	••	MEA					WEAT	WEATHER				WEA	WEATHER			
		TEMP	TEMP DEG C	1-9-	100		TEMP DEG	DEG C	-8.3			TEMP	DEG C	-8.3		
	. 0	DEM POINT DEG C	DEG C	-12.8		30 :	DEW POINT DEG C		-13.3		DEN	DEW POINT DEG C	DEG C	-12.2		
	>	VISIBILITY	CHI.	20		: 1	VISIBILITY (MI)		20		VIS	VISIBILITY (MI)	CHI	85		
CLD (TENTHS)	*COM	MID	H	1 2 TOTL		2:LOW	MID	111	2 TOTL	11 3:	LOW	MID	2 HI	8 TOTL	TL 10:	
CLD HT (M)	FOM:		MID	H	6095	" LOW		MID 4570 HI		: 5609	LOW	2	MID 4570	IH O	7620 :	
EXPONENTS	: A=	-09 B=	9 59.	30		: A=	-02 8=	.30 P=	.28		A= -	A=97 B=65 P=	65 P	55		
NET RADIATION		~	7.26 MW	W/CM2			-	.26 MW/CM2	CM2			-3	-3.98 MW/CM2	/CM2	•	
RICHARDSON NO.:	(4H)	.27 (	(8M)	.63(16M) 1.15	1.15	14) :	1) +4. (1	8M1 1.0	1(16M)	1.79	( 4 M )	.34 (	( 8M)	.56(16M)	. 78	
		(39.192M)		BSERVEC	DATA	\$ (38	. 192M1	801 90.	SERVED	DATA) :	(39.	192M1 1	.12 (0	BSERVED	DATA):	
(1/1)*10	14) :	3.51	(8M) 8.	8.20 (16M)13.19:	1113.19	1 (4M	(4M) 8.24 (8M)20.21 (16M)31.24:	8M)20.2	1 (16M	31.24:	( 4 M	(4M) 5.15 (M4)	8M) 6.	(8M) 6.63 (16M) 6.20:	1 6.20:	
USTAR	* (4	4M). 1060 (	(8M).07	763 (16M).0596:	11.0596	47 :	1) .0767	8M).051	1 (16M)	.0387	(4M)	0050.	8M).05	(8M).0518 (16M).0585:	0.0585	
	GM	SM	TEMP	TEMP SIGA SIGE : WD	SIGE	3			SIGA	SIGE	9			SIGA	\$ 16E :	
HEISHT (M) :(DEG)	: ( DE	(S/W) (9		(DEG)	(DEG):(DEG)	: ( DEG	(N/S)		(C) (DEC) (DEC):(DEC)	(DEG)	(DEG)	(M/S)		(C) (DEG)	(DEG):	
1.			-6.3	17				-6.46					-8.4	1		
2.	: 126	8. 1.93	-6-	14 6.1		: 127				•	161	1.08			••	
*	: 117.		-3.	48 4.7		: 117.	. 2.43	-4.48	4.1	•	176.	1.35	-7.19	9 57.1	•	
.8	: 113,		-5.	3.5 2.8	0.1					1.3		1.69			8.9:	
16.	: 114		-2-	3.5	4.1					9.		2.86			15.9:	
32.	: 13	1. 4.24	-1-	14 6.9	1 2.0:				4.9	1.3:		16.4			4.2:	
48.	: 15	8.	7.6	58 7.5	3.5		•	38	4.8	2.0:			-1.5		3.6:	
									֡							,

	-	1													
	**	SH			S 1 GE	••	MS	TEMP		SIGE		MS	TEMP	SIGA	SIGE
HEIGHT (M)	••	(M/S)	3	(DEG)	(050)	••	(M/S)	3	(DEC)	(DEG)		(N/S)	3	(DEG)	(DEG)
1.0		1.74	!	4.0	.2		1.66	-6.43	3.9	.5		.65	-8.64	214.1	49.6
2.0	••	2.14		4.3	4.		2.02	-6.10	4.0	9.	••	.95	-8.33	109.2	31.5
4.0	••	2.63	-5.13	4.6	9.		2.46	-5.46	4.0	.1	••	1.39	-7.73	55.7	20.1
8.0	••	3.22		6.4	6.		2.99	-4.28	1.4	6.	••	2.03	-6.62	28.4	12.8
16.0	••	3.96		5.2	1.4	••	3.64	-2.36	1.4	1.1	••	2.96	-4.70	14.5	8.1
32.0	••	4.86		5.5	2.2	••	4.43	24	4.2	1.3	••	4.33	-2.16	7.4	5.5
48.0	••	5.48		5.8	5.9		4.97	45	4.2	1.5		5.40	-1.34	5.0	4.0
		20/00	0TH/02	BU*100	A.		20/00	DTH/02	80*100	<u>~</u>		20/00	DTH/D2	BU*100	14
4.0		.1811	.2461	2.089	00.		.1619	.3128	3.039	00.		.1796	.2960	9.022	00.
8.0	••	.1112	.2135	4.790	00.	••	9860.	.2680	966.9	00.	••	.1310	.2625	14.964	00.
16.0	••	.0683	.1485	8.782	00.	••	0090	.1782	12.474	00.	••	9560.	+561.	20.780	00.
39.5*	••	.0779	.0388	9.302	00.	••	+160.	.0163	5.308	00.	••	.0304	.0287	6.060	00.

	70	DATE 15/	15/03/77 WEATHER TEMP DEG	11.	08:00:00 5.0 2.2		DATE 15.	15/03/77 WEATHER TEMP DEG	¥ 7	09:00:00 0,3 1.7		DATE 15/ DEW POI	15/03/77 WEATHER TEMP DEG POINT DEG	TIME 10	:00:00	
CLD (TENTHS)		1181811	- 9	85 I 2 570 H	TOTL	3:1	VISIBII	BILITY (MI MID MID	) 85 HI 7 HI	TOTL 7	1001:	ISI	MID H	85 II 10 HI	TOTL 1	:01
EXPONENTS MET BACTATION		65	B= 89 P	- 1			A= .32	8= .60	P=07		. A=	14	8= .10		6	
		(4M) 6.03	13 (8M)	4M) 6.03 (8M)13.71(16M)27	1)27.79		(44)-1.41 (39,192M)	3 6	.2.71(16M)19	1) 19.54 10 DATA)		4N)-1.03	- 7	3.20(16M)-8.21	11-8-21 ED DATA)	_==
(1/1)*10	-	*****( W5)	I* (8M)	91) *****(W8)	-		(4N)-3.75	(8M)	3.57	-		(4M)-2.74	(8M)	-4.21 (10	(16M)-5.39	39:
USTAR	-	0000° ( W )	( MR) 00	(8M).0000 (18	(16M).0000	:	(4M) .119	8 K	.1034 (16M	M) - 0000		6H1.15	8		(16M) - 1657	: 10
		QM	T SM		S	••	Q.		4		••			4		**
HEIGHT (M)	: ( DEC)		) (S/W)	(C) (DEG)	(DEG)		DEG) (	M/S) (C)	(050)	(DEG)	:	DEG) (1	M/S) (C	() (DEG)	(DEG)	::
1.			!	-7.90		-		-3	1.85					.83		
2.	. 14	149.		-7.43 76.9	6	••	167.		1.84 15.3	3			1.37		.2	••
,	. 14	143.		_		••		•18								••
. 8		171.	- 88 -	-6.99 59.4	.4 19.		159.	1.20 -3	15	.1 9.2		179.	1 19-1	17	.3 12.2	5:
16.					1		371		33							. :
48.	51	197.		0-11 -0			197.		40, 44,	.5 26.8				.35 13	.2 14	14.3
			-							1	1					1
LEAST SQUARE	SF	SQUARES FITTED DATA	DATA													
		MS	TEMP	P SIGA	SIGE	••	WS	TEMP		SIGE		NS	TEMP	SIGA	SIGE	**
HEIGHT (M)		(N/S)	3	-	(DEG)	-	(M/S)	3	(DEG)	(DEG)		(N/S)	3	(DEG)	(DEG)	"
1.0		•22	-7.58	-	85.1	••	1.26	-3.	10.6	2.6		1.33	.83	21.3		**
2.0		.27	-7.46	6	51.6	••	1.20	-3.	13.2	4.0		1.42	.78	19.4		••
0.4		.35	-7.22	9	31.3	••	1.14	-3.	16.5	6.1		1.51	.70	17.6		••
8.0		**	-6.76	42.7	19.0	•••	1.08		20.6	9.5		1.61	•55	16.0	12.3	••
16.0		. 20	-2.95	7-			1.03		7.67	0.4.0		1:1	87.	9.4.0		• •
32.0			****		0.7		16.	20.4	32.1	2.1.2		7901		13.2		•
48.0		18.	-4.00	14.2	2.6	. !	.95	-3.45	30.5	1./2		1.89	36	12.5		•
		20/00	DTH/D2	80*100	RI		20/00	DTH/02	BU*100	RI		Z0 / NO	DTH/D2	BU*100	RI	
4.0		.0277		61.863	00.	••	0196	6910	670	13		- 0316 -	.0287	719	22	
8.0		•0176		169.041	00.		- 0003	+900-	-1.284	19	••			-2.235	-1.60	••
16.0		20112	.0945	285.278	000		0044	.0105	9 5	000		- 0000	0184	-5.738	10.51	••••
27026		1000		407.102			*****	00400	2					017.0-	. 22.10	•

	: DATE			TIME					P .	0.000						
1			15/03/11		00:00:11		DAIE	12/03/11	TIME I	12:00:00	•	DATE	15/03/17		TIME 13:0	13:00:00
1	••		WEATHER			•		WEATHER			•		•	HER		
OLT MATE		TEMP	NP DEG	9 )	6.3			TEMP DEG	2 3	4.	••		TEMP	DEG C	8.3	
ITENTAG		TNICA	NT DEG	1 (	6.01	••	DEW P	W POINT DEG	0	1.	•	DEW	DINT	DEG C-	-11.7	
	2	181C	VISIBILITY (MI)	6 11	TOT	101	ON ISTR	MID	HI 93	TOTA	10:	7	MID	I	10 10	TOT. 10
-	107		=		-	20	LOW	MID	52	1 762	0	LOW			HI 7	_
EXPONENTS	: A=	17	B= .0;		::		A=0	8=	8 P=	11	••	A=	05 8=			
NET RADIATION			33.00 MW/	MW/CM2		•		39.91	Σ				8	.50 MW/C	/CM2	. !
RICHARDSON NO.	••	55		(8M)-1.64(16M)	4-( W9	. 00.	- (M+)	(8M)	1			(4M)	35 (	( 8M) -1.	-1.07(16M)-2	-2.45
	: (39.	(39.192M)	1		VED	DATA):	(39.19		JB SE	VED DA		_	92M) -		ш	DATA
(1/L)*10 USTAR	(4E)	(4M)-1.48		(8M)-2.18 (8M)-1853 (	16M)	(16M)-2.63: (16M).1918:	(4M)-1 (4M).2	1)-1.02 (8M)-1.	391	(16M)-1.78 (16M).2461	.78:	E E	3303 (	8M)-1.	.42 (16) 327 (16)	(16M)-1.62 (16M).3341
	9	-	WS TE	TEMP SI	SIGA	SIGE :	9	WS T	EMP SI	GA SI	SIGE :	9	MS	TEMP	SIGA	SIGE
HEISHT (M)	0		-	-		DEGI	056)	S	) (DE		EG1:	(DEG): (DEG)	(M/S)	5	0	(DEC)
-				3.50					6.01					7.4	7	
	: 162.		.78		5.0	••	202.	2.42	6.01 22	2.2	••	174.	3.47	7.13	3 20.9	
;	: 152.	-	8		2.8	••	193.	.65	66	2.0	••	165.	3.78	6.25		
	: 152.			3.46 2	21.3	13.4:	192.				13.1:		4.00	96.9		
16.		2	2.21 2			••	186.	3.16			3.9:		4.30	41.9		
32.	: 152.			-	2.9	14.5:	185.	3.24	4.57 18	9.	16.9:		4.36	5.84	17.	11:11
48.	: 155.		. 7	-	4.6	16.6:	.061				7.5:	175.		5.5		
LEAST SQUARES	S FITTED	TED DA	DATA													
		S¥	TEMP	SIGA		SIGE	S.M.	TEMP	P SIGA	A SIG	GE :	-	WS	TEMP	SIGA	SIGE
PEIGHT (M)		(N/S)	(0)	-	-	DEG1 :	S/W)	•			DEG1 :	S/H)		(3)	(050)	(DEG)
1.0	:	19.	3.34	28.9	12	3.8 :	2.26			8	. 6	3.		.12	21.2	5.0
2.0	-	1.80	3.29	25.7	-		2.4	5.	23	10.	. 0	3.	3.53 7.	7.06	20.4	6.5
0.4	-	1.94	3.19	~	-		2.6.	2.	22		*	3.			19.8	1.0
8.0	7	60.7	3.02	~		4.8	2.84		50	15.		è.	3.97 6.	19.9	16.1	8.3
16.0		5.52	2.70				3.0	•	61			•			18.4	8.6
	: 2	2.45	5.26	1.91	-		3.30	*	18	16.	*	;	.46 5.	7.5	17.8	11.6
48.0		53	2.04	15.0	-		3.4	5 4.34	17.9	17.	9	*		19	17.5	15.8
	: DU/DZ		DT H/ D2	80*100		RI :	ZQ/NQ	DTH/DZ	BU*100	O RI		20/00	2 OTH/02		001 ± 08	۳. ا
4.0	6140. :	'	.0354	534	1	. 16 :	.0666	0473	385	-111	-	.0731			216	07
8.0	: .0258		0309		1	. 12.	.0359		-1.151			.0387				30
16.0	: .0139	•	0217	-3.906	•	8.00 :	+610.	1	-2.772	•	. 9	.0205			- 964.1-	1.62
39.2*	0056	•	*****	-3.889	7	2.00 :	.0131	0038	-1.828	•	2 :	910.	6900 0			-6.56

			15/03/77	-	4F 14:	14:00:00		DATE	15/03/77	7 TIME		15:00:00		DATE 15	15/03/17	TIME	16:00:00	00:
		-	WEATHER				•• ••		MEA	E C					WEATHER		0 01	
	: 0E4	POINT	NT DEG		-12.2		••	DEM P	POINT D		-14.3		••	DEN PO	-		14.4	
CID LIENTER		VISIBILITY	LITY (NI)	= =	85	101		SI	BILITY		- C	1 110		VISIBI	BILITY (MI)	17 85	TOT	5
110	107 :		MID	:	E	7620	-	LOW	•		) I	1 7620			H	3660	HI 7620	
EXPONENTS	. A= -	=	B= .13	3 P=	12		••	A=0	2 8=		01.			1=07	*	9 P=		
NET RADIATION			35.1	MM.	7 MW/CM2				12,	21	MW/CM2				=;		2	
KICHAKUSUN NU.	(44)	14M)58			101111	11-7-11		130.10	77.	20	I DRSERVED	DATA)		30.197M)	10 CM	CORSERVED		DATAL
(1/1)*10		-1.04		1-1-4	(8M)-1.43 (16M)	MI-1-44	*	•		3		-			-	1	-	
USTAR	( W b)	(4M).2763		.28	91) 98	2. E	374:	(4M).3	18	M) . 3874	(HO1) +	11.3796	:	\$ . CE .	4440 (BH)	1100	HOT	.4303
	9	0.876	HS T	TEMP	SIGA	I SIGE	. a.	Q.	S M	TEMP	SIGA		••				SIGA	SIGE
PEIGHT (M)	: ( DEG )		N/S) (	3	(DEG)		(DEC):	(DEC)	(M/S)	3	(DEC)	(DEG)	:	DEG) (	(N/S) (	(2)		(066)
1.			276	8.58						8.99						9.95		
2.	: 172.	. 2		8.46	0 20.9	6	••	203.	4.17	8.78	27	•		206.	.84		18.3	
+.	: 163.			8.1		4	**	192.	4.65	8.25	28		••				17.9	
	: 164.	. 3		7.4			.4.0	193.	16.4	7.83	58	0			5.68		17.6	-
.91	: 191 :	, 3	3.72	7.16	6 12.9			186.	5.35	7.62							16.2	1.9
32.	: 166.	9		6.77			:6.1	188.	5.56	7.36	56	2 10.6:		194.	14.9	8.17	14.9	80
48.	: 172.			6.53	3 14.	- 1	3.4:	196.		. 1	5	!		200.		.03	12.1	8
LEAST SQUARES		FITTED DATA	ATA	4														
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		¥ S	TEMP	d	SIGA	510	1 GE :	MS	1	EMP	SIGA	SIGE		MS	TEMP			SIGE
HEIGHT (M)		(M/S)	(0)		(DEC)	(DEG)	: 15	S/W)		3	DEGI	(DEG)		(M/S)	(3)	-	-	DEGI
1.0	: 2	.63	8.43		22.5		. 6	3.9		75	8.5	7.2		4.63	6	19.6		6.2
2.0	: 2	2.86	8.33		8.02	8.6		4.2	80		1.8	7.8	••	4.95	6	18.	1	9.9
4.0	. 3	3.11	8.13		19.2	4.6	••	4.56	80	2 14.	27.8	8.4	••	5.30	9.45	17.1		1.0
8.0	:	1.38	7.78		17.8	10.3		4.9	<b>6</b> 0		1.4	9.1	••	5.67	6	17.	0	4.7
16.0		1.67	7.20		16.5	11.3		5.2	-		1.0	8.6	••	6.07	00	16.	2	6.7
32.0		66.1	9.29		15.2	12.3		5.6	-		9.9			6.49	7	15.	•	4.6
48.0		61.	19.9		14.5	13.0		5.9	-		4.9	11.1		6.75	8	15.		9.7
	: 0U/0Z		DTH/DZ	96	1*100	RI		20/00	DTH/02		8U*100	RI		20/00	DTH/DZ	8U*100		R.
4.0	0866		0816	·	470	12		.1090	i		205	05		.1193	-*0754	149		+0
8.0	0470		0680	-1.	329	-1.07	••	.0585	i	•	569	31	••	.0638	0622	430		15
16.0	0256		60400-	-2.	111	-5.1	••	.0314	030	•	- 166.	60.1-	••	.0341	0359	868		. 84
39.5*								4.00				-						-

	t
-	•
•	ľ
C	)
C	
u	
>	•
9	C
u	J
U	7
a	3
	1

: 00:0	•	••	•		TL 10:	7620 :	•	•	1.12 :	DATA!	112.55:	54: (4M).0400 (8M).0273 (16M).0229:	SIGE :	(DEG):		•	•	1.6:	3.7:	***	4.4:
E 19:0		6.7	-14.0	30	10 TO	IH O	.25	CH2	2(16M)	SERVED	13 (16M	3 (16M	TEMP SIGA	(DEG)						8.8	
7 TIM	HER	DEG C	2 93 66 C	CIN	2 HI	998 0	.51 P=	/MH 65	7. (M	22 (08	M) 10.5	M) . 027	TEMP	3	7.76	7.93	7.79	8.05	8.16	8.00	7.81
: DATE 15/03/77 TIME 19:00:00	WEATHER	TEMP D	POINT	BILITY	MIO	H	05 B=	-6.	.31 (8	92M)	4.34 (8	0400	N.S	(N/S)		.83	1:11	1.35	1.50	1.67	
DATE			DEW	VISI	MO.	LOW	A=		( M + )	(39.1	(H+)	(4M)	9	10EG)		93.	84.	88.	89.	95.	103.
										DATA):	16:	.3054:	SIGE :	(DEG): (DEG)		••	••	4.7:	4.4:	4.1:	4.4:
TIME 18:00:00		8.4	15.0	0	10 TOT	HI 7	.13	M2	( 16M)	ERVED L	(16M)	(16M)				11.2	1001	6.6	8.2	6.7	6.2
	ER	2 5	- 25	7 (IN	2 HI	3660	=d 50	4 MM/C	111- (	8 (085)	1 15	1.3049	TEMP SIGA	(3)	8.83	8.82	15.8	8.47	8.39	8.16	1.90
: DATE 15/03/77	WEATHER	TEMP DE	DINT DE	ILITY (	D:LOW MID 2 HI 10 TOTL	MID	9 8=	-5.4.	.04 (BM	2M) 2	.11 (8M	(4M).3099 (8M).3049 (16M).3054:	!	(M/S)		3.50	4.07	4.47	4.86	5.11	
DATE			DEW P	VISIB	MO.	LOW	A=1		- (M)	(39.19	- (M)	(4M) .3	Q.	DEG.		187.	176.	177.	171.	172.	176.
				••	=		•	•	: 69 :	SATA):	: 44:-	.4178:	: 3919	(DEG): (DEG)		••	••	5.4:	5.4:	9.1:	6.8:
ME 17:00:00		8.9	-15.0	0	10 TOTL	HI 7	01.	W/CM2	31(16M)65 :	ERVED (	(H91)	14 (16M).4178:		(DEG)		10.8	9.01	8.6	8.7	7.5	8.1
TIME	ER		v	_	-	366	.13 P= .10	S MW/C	i	2 (085	142	.45	TEMP	(3)	9.64	9.35	9.11	8.75	8.60	8.29	8.03
DATE 15/03/77 TI	WEATHER	TEMP DEG C	DEW POINT DEG	VISIBILITY (MI)	MID	MID	111 8=		.11 (8M)	2M)4	.31 (8M	277 (8M)	S.M.	(N/S)	200	4.81	5.38	5.69	41.9	6.47	
DATE		The state of the state of	DEW P	VISIB	FLOW	104	A=1		(4M)11	(39.192M)	- (M+)	(4M).4277	QM	:(DEC)		202.	192.	193.	187.	190.	196.
••	••	••	••	••		••	••	. NO	ON	••	••	••	"			••	••	••	••	••	••
					CLD (TENTHS)	CLD HT (M)	EXPONENTS	NET RADIATION	RICHARDSON NO.:		(1/1)*10	USTAR		HEIGHT (M)	1.	2.	+	8	16.	32.	48.

4
DATA
TED.
11
FIT
SQUARES
3
SO
-
EAS
ui

	••	MS	TEMP	S	SIGE		MS	TEMP	SIGA	SIGE	••	N	TEMP	SIGA	SIGE	-
HEIGHT (M)	••	(M/S)	5	(050)	(DEG)		(M/S)	(3)	(DEG)	(DEG)	••	(M/S)	3	(DEG)	(DEG)	-
1.0		4.56		12.1	4.0		3.30	8.74	13.4	5.1		.75		11.3	.7	
2.0	••	4.90	9.34	11.11	4.3	••	3.62	8.72	11.7	4.9	••	.89	7.85	10.9	1.0	
4.0	••	5.27		10.3	4.8		3.97	8.66	10.3	4.8	••	1.06		10.6	1.4	
8.0	••	5.67		9.5	5.2		4.36	8.56	0.6	4.6	••	1.26		10.2	2.0	
16.0	••	60.9		8.8	2.1	••	4.79	8.37	7.9	4.4	••	1.49		6.6	2.8	
32.0	••	6.55	8.14	8.1	6.2		5.26	8.09	6.9	4.3	••	1.76		9.6	4.0	
48.0		6.84		7.7	6.5		5.56	7.93	4.9	4.2		1.95		4.6	4.9	
	-	20/00	0U/0Z 0TH/0Z	80*100	R. I		20/00	DTH/D2	BU*100	<u>۳</u>		20/00	<b>DTH/D2</b>	BU*100	R.	
4.0	-	.1275	0498	i	01		.1239	0163	057	+0		.0603	.0321	1.599	00.	
8.0	••	.0686	0416	288	15	••	.0890.	0910	164	-111	••	.0357	.0262	3.716	00.	
16.0	••	.0369	0253	;	65		.0374	+600	366	24	••	.0212	-0145	5.827	00.	
39.5*		.0229	0062		-1.36		.0278	0062	-1.186	-3.87		2710	0100	-3.117	-27.01	

	١		
	(		
	(		
		į	ı
	ć	1	į
		j	ı
	4	3	ı

			.1 7:	: 079	••	••	. 72.	DATA):	.85:	.0806 (16M).1113:	S16E :	(DEG) :			••	2.7:	2.6:	1.2:	.6.
11ME 22:00:00	4.5	200	7 TOTL	Ŧ	99.	CM2	3(16M)	SERVED	1 (16M)	W91) 9	TEMP SIGA	(DEG)				8.8			
THER	) EG C	CHI	Ħ	0	-4 89	.95 MW/CM2	1H) .2	26 (08	M) 1.2	9M) . 080	TEMP	(3)	1.76	2.20	2.53	3.56	4.65	5.58	6.57
: DATE 15/03/77 : WEATHER	TEMP DEG C	A II ITY	MIO	Ī	83 B= -	-7-	.16 (8	92M) .	1.37 (8	0637 (6	NS	(N/S)		.80	1.30	10.2	3.20	2.07	
DATE	340	VISI	101	LOW	A=		(H+)	(39.1	(H+)	(4M)	QM	(DEG)		.66	92.	.16	82.	75.	76.
	•••	• •	1:1	: 079	••	•	. 25 :	DATA):	.75:	.1451:	SIGE :	(DEG):(DEG)	•	••	••	1.5:	1.1:	.6.	.7:
TIME 21:00:00	5.0	7.71	7 TOT	1 IH	.42	M2	( 16M)	ERVED	(16M)	(H91)	SIGA	(DEG)		4.4	3.7	2.0	1.6	9.1	₩.
TIME IER	000	MI	Ŧ		=d 55	1 MW/C	91. 11	0 (085	19. (1	11,1396	TEMP	(0)	4.07	4.33	4.47	5.15	5.74	6.16	49.9
DATE 15/03/77 WEATHER	TEMPORE C 5.0 :	11 1TY	MID	MIC	8 8= -	-7.6	.08 (81	2M) .3	.43 (8h	357 (84	N.S	(N/S)		1.67	2.25	3.07	4.10	5.33	
DATE 1	9	VISTA	MO	LOW	A=4		( H)	(39.19	(4H)	(4M).1	1			73.	63.	63.	63.	67.	72.
	•••		1:01	: 079	••	••	.32 :	SATA):	1.17:	149 (16M).1275:	316E :	(DEG):(DEG)		••	••	.8:	:4.	.2:	:4.
20:00:00	5.6	7.71	10 TOTL 10:	HI 7	.43	M2	(16M)	ERVED (	(16M)	(H91)		(DEG)		5.4	3.7	2.3	1.8	1.8	5.5
TIME			-		54 P=	J/MM T	1) .24	1 (085	-		TEMP	(0)	4.14	5.03	5.37	6.47	7.31	1.69	7.57
DATE 15/03/77	TEMP DEG C	VISTATION OF C	MID	MID	9 8=	6.9-	(4M) .13 (8M) .24(16M)	2M) .01	-		N.S	(M/S)		1.52	2.18	3.14	4.30	4.79	
DATE 1	0	VISTA	LOW	LOM	A=2		( 4M)	(39.19	86° (W)	(4M),1154	Q.	: (DEG)		58.	50.	-19	55.	62.	.99
	•••	• •			••	" NO	ON	••	••	••				••	••	••	••	••	••
			C (TENTHS	CLD HT (M)	EXPONENTS	NET RADIATION	RICHARDSON NO.		(1/1)*10	USTAR		HEIGHT (M)	1.	2.	.4		.91	32.	48.

4
-
4
DA
_
ED
w
-
-
F
•
S
RE
œ
SQUA
2
٠.
-
AS
W
_

		••	••	••	••	••	••		! "	••	••	••
SIGE (DEG)	12.8	8.0	5.0	3.1	2.0	1.2	6.	2	00.	00.	00.	00.
SIGA (DEG)	43.5	24.4	13.7	7.7	4.3	5.4	1.7	BU*100	6.457	9.124	10.825	11.627
(C)	2.01	2.20	2.57	3.25	4.42	96.5	6.43	DTH/02	.1855	.1646	.1229	.0719
MS (M/S)	.51	18.	1.28	2.02	3.20	5.07	6.63	20/00	.2027	+091.	.1270	.0978
		••	••	••	••	••	••	-		••	••	••
SIGE (DEG)	3.8	2.8	2.1	1.5	1:1			<u>۾</u>	00.	00.	00.	00.
SIGA (DEG)	6.3	4.5	3.3	2.3	1.7	1.2	1.0	BU*100	1.232	2.418	3.932	0.349
TEMP (C)	4.21	4.32	4.54	4.93	5.59	14.9	6.55	DTH/02	1111.	6160.	9110.	00400
MS (M/S)	1.26	1.68	2.26	3.02	4.05	5.45	6.43	20/00	.2229	.1492	6660.	.0688
		••	••	••	••	••	••			••	••	••
SIGE (DEG)	2.2	1.5	1.0		• 5	.3	.3	۳ ا	00.	00.	00.	00.
SIGA (DEG)	5.3	4.4	3.6	2.9	2.4	2.0	1.8	80*100	2.131	3.919	5.219	144.
TEMP (C)	4.91	5.10	5.46	11.9	7.13	8.04	1.44	DTH/02	.1788	14641.	.0905	.0025
(R/S)	1.20	1901	2.17	2.93	3.94	5.30	6.31	20/00	.2187	.1472	1660.	1560.
			••	••	••	••				••	••	
PETGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0		4.0	8.0	16.0	39.5*

		DAIL 13/03/1/ 11ME	-		23:00:00	DA L	DAIE 16/03/1/	LIME	11 ME 00:00:00	00:	DAIE	DATE 16/03/7/	EI	11ME 01:00:00	. 00:
		WEA	THER				WEATH	HER		**		WEAT	HER		••
		TEMP	TEMP DEG C	3.9	•		TEMP DE	J 93	3.4	•		TEMP C	EG C	2.2	
	: 06	DEM POINT DEG C	DEG C	-10.0		DEW	: DEM POINT DEG C - 9	- 3 93	4.6	••	DEW	DEW POINT DEG C	) EG C	-8.9	
		VISIBILITY (MI)	(IW)	20	••	VIS	IBILITY (	[MI) 20		••	VISI	BILITY	CHI	0.	••
CLD (TENTHS)	FLOW	MID	H	10 TO	_	LOW	MID	IH	TOT OIL	10:	LOW	MID	IH	10 TOT	:01 7
CLD HT (M)	. LO		MID	IH		LOW	DIW		HI 7620 :	: 07	LOW	M	0	HI 7	620 :
EXPONENTS	: A=	39 B=	58	.32	•	A= -	.34 B=	=d 66.	.42	••	A=	02 8=	.83 P=	.38	••
NET RADIATION		-6.14 MW/	5.14 M	H/CM2	••		-5.4	14 MW/Ch	12	••		-3.	63 MW/C	M2	••
RICHARDSCN NO.:		1 .05	( 8M)	.12(16M)	. 28 :	( M )	.07 (8#	141. (1	(W91	. 27 :	(4H)	.07 (8	51. (M	(H91)	. 88 :
		1.192M182	2.20 ((	DBSERVED	DATAL	(39.	192M) 4.C	34 (0BSE	RVED C	SATA):	(39.1	92M) .	39 (08	ERVED	DATA):
01*17/1)	14) :	61. (1	( H8 )	.39 (16M	. 93:	( M+)	.32 (84	11 .53	(16M)	.87:	(4H)	.38 (6	14) . 64	(16M)	:16.
USTAR	14) :	(4M).2322 (8M).2181 (16M).1894:	[8M).2]	181 (16M	11.1894:	( 4M)	4: (4M).1534 (8M).1570 (16M).1551: (4	41.1570	(16M).	1551:	(4H).	1: (4M).1737 (8M).1691 (16M).1624:	M).1691	(16M)	.1624:
	OM	S# C	TEMP			9	S.H.	TEMP S		IGE :	Q.	M.S	TEMP		\$ 391S
HEIGHT (M)	:(050):	(W/S)	(3)	( DEG )	(DEG): (DEG)	(DEG)	(M/S)	(0) (0)		(DEG): (DEG)	(DEC)	(N/S)	(C) (DEC)	2 17	(DEG):
1.			2.72	7.2	*			1.82					1.37		
2.	: 110					109.	1.99	2.08	9.9	••	132.	2.18	1.57	6.3	••
	1000						2.46	2.17	5.7	••		2.80	1.70	5.1	••
8.	. 98	1. 4.21					3.10	5.69	4.7	3.6:		3.62	2.26	3.5	2.3:
.91	*6 :						4.08	3.59	3.9	3.7:		4.84	3.22	2.3	1.6:
32.	: 92			07 3.0	1.8:	92.	6.62	4.37	1.9	1.4:	106.	6.10	3.85	5.6	1.6:
48.	70 :		6.20					5.64	2.9	.6:			4.48		••

DATA
0
ED
FITTED
F
S
AR
SQUARES
151
LEAST

	••	SM	TEMP	SIGA	SIGE		SM	TEM	•	SIGE	••	MS	TENP	SIGA	SIGE
HEIGHT (M)	••	(M/S)	3	(DEG)	(DEG)		(M/S)	3	(DEG)	(DEG)	••	(M/S)	5	(DEG)	(DEG)
1.0		2.31	2.84	11.9	14.8		1.39	1.93	8.9	37.9		1.67	1.42	7.9	3.7
2.0		2.87	2.92	1.6	6.6		1.86	2.03	7.0	19.0	••	2.17	1.54	6.1	3.1
4.0	••	3.57	3.08	6.9	9.9	••	5.49	2.24	5.5	9.6	••	2.82	1.78	4.8	5.6
8.0	••	4.44	3.40	5.3	4.5		3.33	2.63	4.4	4.8	••	3.66	2.23	3.7	2.2
16.0	••	5.53	4.00	4.0	3.0	••	4.46	3.36	3.4	5.4	••	4.74	3.01	2.8	8.
32.0	••	6.88	5.14	3.1	5.0		96.5	4.61	2.7	1.2	••	6.15	4.05	2.2	1.5
48.0		7.82	6.17	5.6	1.6		7.07	5.56	5.4	8.	••	7.17	14.4	1.9	1.4
		20/00	DTH/DZ	BU*100	R.I		20/00	DTH/02	BU*100	RI		DU/DZ	DTH/D2	BU+100	12
4.0		.2625	.0887	.395	00.		.2449	1001.	1.008	.00		.2474	.1253	.901	.00
8.0		.1634	.0867	.995	00.		.1638	.1040	2.131	00.	••	.1605	11111	1161	00.
16.0	••	1101.	.0827	2.446	00.	••	1096	.0925	4.225	00.	••	1401.	.0857	3.459	00.
39.2*	••	.0059	9080.	7.207	00.	••	.0279	· 0894	10.398	00.	••	.0667	*640*	6.190	00.

	d
-	•
	-
٠	77
	d
	•
•	-
-	
1	1
	-
	>
-	0
1	,
•	•
•	1
0	-

245 345	66 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 :: 60 ::
7620 7620 7620 7620 7620	\$16 06 10 2
DATE 16/03/77 TIME 03:00:00 : DATE 16/03/77 TIME 04:00:00 :  WEATHER  TEMP DEG C -2.8 : TEMP DEG C6 :  VISIBILITY (MI) 20 : VISIBILITY (MI) 20 :  LOW MID HI 3 TOTL 3:LOW MID HI 3 TOTL 3:LOW MID HI 3 TOTL 3:LOW MID HI 7620 :  A=35 B=61 P= .42 : A=30 B=59 P= .30 :  A=35 B=61 P= .42 : A=30 B=59 P= .30 :  (4M) .08 (8M) .19(16M) .44 : (4M) .49 (8M) 1.17(16M) 2.55 :  (4M) .45 (8M) .88 (16M) 2.10: (4M)10.09 (8M)27.31 (16M)62.49:  (4M) .1152 (8M) .1096 (16M) .0946: (4M) .0298 (8M) .0191 (16M).0123:	TEMP SIGA SIGE: (C) (DEG) (DEG): -2.81 -2.40 13.9 -2.22 10.2 -1.92 8.8 4.2: -1.69 5.9 3.4: -1.61 6.2 1.4:
20 20 11 17 11 17 1 1 1 1 1 1 1 1 1 1 1 1 1	2022615
HI H	TEMP (C) (C) (C) (C) (C) (C) (C) (C) (C) (C)
MEATHER MP DEG NT DEG ITY (MI DEG NT DEG OF NT	(#/S) 1.04 1.17 1.67
16/0 TEM TEM BILI MI 30 B 9-20 0-09	3.5
ISI	40 DEG) DEG) 284. 279. 273. 283.
	20 22222
20 3 20 4 4 4 4 4 4 4 4 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 4 6 0 9 9 4 6 0 9 9 4 6 0 9 9 4 6 0 9 9 4 6 0 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	SIGE: WD (DEG): (DEG) : 286. : 284. 3.7: 279. 2.1: 273. 1.8: 283. 1.8: 283.
8 0 0 76 2 2 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
3 3 3 4 HI	SIG 0000 0000 0000 0000 0000 0000 0000 0
H HI	TEMP SIGA (C) (DEG) -2.37 -2.07 8.3 -1.64 5.4 -1.15 3.8 -1.15 3.8
MEATHER MP DEG MP DEG ITY (MI	23 77777
DATE 16/03/77 TIME 03:00:00  WEATHER  TEMP DEG C -2.8  DEW POINT DEG C -10.0  VISIBILITY (MI) 20  LOW MID HI 3 TOTL  LOW MID HI 7620  A=35 B=61 P= .42  -7.26 MW/CM2  (4M) .08 (8M) .19(16M) .4  (39.192M) 3.08 (085ERVED DAT  (4M) .45 (8M) .88 (16M) 2.	(M/S) (M/S) (1.47 1.95 2.45 3.22 4.82
E 16 W PO SIBIS 35	
DAT   DE   VI   VI   VI   VI   VI   VI   VI   V	MD (DEG) 292 283 283 276 279 290
3::0 3::779 3::41::41::749	SIGA SIGE: WD (DEG) (DEG): (DEG) 8.9 : 292. 10.3 : 283. 13.9 2.8: 285. 13.5 3.1: 276. 5.0 3.3: 279. 3.8 2.5: 290.
762 762 762 11.00	S S S S S S S S S S S S S S S S S S S
L.1 -8.9 20 3 TOTL HI 7620 .37 CM2 3(16M) .79 SERVED DATA 6 (16M) 6.4	8.00 10.30 113.50
TIME CC CC HI 20 HI -53 CDBSE 6.00	P 85 77 77 78 78 23 23 26 26
TEMP DEG C DEW POINT DEG C VISIBILITY (MI) M MID M MID  -27 B = -03 -7.26 M  4M) .26 (8M) 39.192M) .12 ( 4M) 3.28 (8M) 6 64M) .0779 (8M)	1 1 2 2 1 2 2 2 2 2 3 3 2 2 4 4 5 2 2 3 4 4 5 2 3 4 4 5 2 3 4 4 5 2 3 4 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5
MEATHER MEATHER INT DEG INT DEG LITY (MI MID MID B=03 -7.26 26 (8M) MI .12 28 (8M) 79 (8M).	L.38 1.38 1.96 2.59 3.31 3.78
TE POI IBIL N N N N N N N N N N N N N N N N N N N	E 1-0mm
#EATHER  #EATHER    TEMP DEG C	(DEG) (DEG) (DEG) (171. (171. (171. (171. (148.
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO. (1/L)*10 USTAR	1. 2. 4. 8. 16. 32. 48.
ADIAS ROSO	6HT 11.
OINA TO	! = !

LEAST SQUARES FITTED DATA

		(M/S)	20	(DEG)	SIGE (DEG)		(M/S)	CC	(DEG)	S1GE (DEG)		(M/S)	(C)	(DEG)	SIGE (DEG)
1		1.14	1.11	15.7	3.2		1.08	-2.24	11.9	12.6		19.	-2.53	15.8	15.5
		1.47	1.31	13.0	3.1	••	1.44	-2.18	9.3	8.3		.82	-2.46	12.9	10.3
	••	1.90	1.71	10.8	3.1	••	1.92	-2.05	7.3	5.4	••	1.02	-2.34	10.5	6.9
		2.45	2.43	0.6	3.0	••	2.56	-1.17	5.7	3.6	••	1.25	-2.11	8.5	4.6
		3.15	3.56	7.4	5.9		3.41	-1.21	4.5	2.3	••	1.55	-1.69	6.9	3.1
	••	4.07	49.4	6.2	5.9	••	4.54	00.	3.5	1.5	••	16.1	-1.07	5.6	2.0
		4.72	4.11	5.5	2.8		5.38	1.32	3.0	1.2		2.16	73	5.0	1.6
!		DU/02 0TH/02	DTH/DZ	BU*100	R.1		20/00	DTH/D2	BU*100	R.		20/00	0TH/02	BU* 100	12
!		1624	.1955	3.096	00.		.1863	.0775	1.219	00.		.0720	7690.	3.913	00.
		1401.	.1643	6.248	00.		.1242	9610.	2.818	00.	••	.0445	.0642	9.445	00.
		.0675	.1020	9.298	00.	••	.0828	.0839	6.670	00.	••	.0275	.0532	20.506	00.
		9880	6110.	3.651	00.		.0347	1 1037	22.199	00.	••	0610.	.0438	60.678	00.

	•	4	ĺ
		4	ľ
	,	-	3
		í	
		>	
	(	2	•
	(	2	•
	(		•
	-	2	

					9	•	••	••	••	-	ö	7		-		••	••	2	7	2.3:	0
00						7620			. 56	ATA	(4M) 3.61*(8M) 20.8*(16M)63.00:	(4M).0618*(8M).0395*(16M).0184	IGE	(DEG):				-	-	2.	ë.
07:00:00					OTL	16	te i		1 2	0 0	M)6	3				6	9	8	7	3	6
07:		3.9	0.0	20	6 TOTL	Ŧ	.30	7	168	RVE	116	911	IGA	(C) (DEG)		9	-	3	5	5.3	*
ME		'	7	50		80	"	70	024	BSE	*8.	*56	S	0	9	5	6	1	-	0	80
-	×	J	v	=	H	48	4	=	1.	2	20	.03	EN	3	3.4	3.1	2.5	1.2	7	.30	.2
11	THE	DEG	DEG	-	4	2	.5	.28	84)	==	8	8M)									
03/	WEA	M	K	ITY	10	Σ	8=	-3	1 * 8	_	1*(	8 * (	MS	(M/S)		10	. 56	.33	2.61	.37	
: DATE 16/03/77 TIME 07		1	POI	811	-	. LOW M	17		. 2	924	3.6	061		3		_	_	~		~	
TE			EM	151		3	•		£	1.6	Ē	3	9	63		. 9	7.	.90	1:	223.	5.
0 :			0	-	LOW	2	A=		7	3	7		SIGE : WD	100		1 .					
	•				6	•	•		8	A	**	53	m.	(9	ï	•	••	1.2	6.	1.3:	7
00:0					ب.				7.0	DAT	**	00.	SIG	100				_			"
TIME 06:00:00		9	2		107		1		E	ED.	6M)	(M9	A	-		6.1	.3	4.	0.5	10.3	. 8
0		4-	-10.5	0		Ŧ	•	M2	91 3	ER	=	=	SIG	DEC			4	-	-	<b>=</b>	
IME					=	886	4	71	. 33	083	***	071	TEMP SIGA		78	40	00	141	48	.23	17
_	4ER	9	9	W	6	•	.29	33 1	-	35	*	€.	TE	2)	4	4-	-3	7	1	Ī	
3/7	WEATHER	0	1 0	2	0	E		-4-	8	11.	(8)	8	S	S		96	**	2	25	39	
9/0	3	LEMI	NIC	11	7		3 8		06.	N Z	*	125	WS	/ W )		•	-	-	-	2.39	
DATE 16/03/77			9	SIB		LOW MID 4880 HI	-		-	(39.192M)11.85 (OBSERVED DATA)	*****(W91) *****(W8) *****(W5)	(4M).0125 (8M).0071 (16M).0053:									
DAT			DE	7	MO	. LOW	A=		4 M	(39	W+)	W+)	9	(DEG): (DEG)		161	183	209	243	264	287
	••	••	••	••	7:9		••	••	••					):(		••	••				
00						20			.33	ATA	5.4	0117	16E	DEG				4	2	1.6:	-
00:00:50					OTL	HI 7620			85(16M) 2.33	BSERVED DATA):	78 (16M)52.41:	02 (16M).0114:				4	3	0	_	1	2
05:		1.7	-10.0		1 9	H	.48	7	16M	RVE	91)	91)	IGA	(DEG)		24.	52.	14.	Š	2.7	*
¥		'	7	20				CM	851	BSE		02		0	3	2	+	2	9	8	6
I	œ	ပ	v	=	Ħ		3 P	-4.33 MW.	-	0) 84.	( 8M) 66.	.01	TEMP	3	3.43	2.9	.2.34	1.4	7		2
11	MEATHER	DEG	DEG	3		MID	5	.33	8M3	.48	8M)	8M	-		'	•	'	•			
DATE 16/03/77 TI	MEA	TEMP DEG C	DEM POINT DEG	VISIBILITY (MI)	MID	Z	A=83 B=53 P=	41	(4M) 1.08 (8M)	=	-	(4M).0116 (8M).01	MS	(N/S)		.75	09.	.50	1.47	2.52	
191		TE	POI	BIL	Σ		83		1.0	92M	6.2	011		3					-	7	
TE			EM	151		×	i		î	(39.192M)	(44)46.22	3	9	63		150.	3.	.0	.2.	.6	
OA			۵	>	FLOM	101	A		5	3	5	7	3	: ( DEG )		15	18	25	262	569	53
••	••	••	••	••			••	" Z		••	••	••				••	••	••	••	••	••
					HS)	=		TIO	Z		01			3							
					ENT	-	NTS	DIA	DSC		11/1)*10	AR		H	-	2.	4	8	16.	32.	48
					5	CLD HT (M)	EXPONENTS	NET RADIATION	RICHARDSON NO.		=	USTAR		HEIGHT (M)							
					CLC	CLE	EXF	NET	RIC					_							

													* OBSERVED DATA	SER	* 08
	6.345	i	.0536		00.	8.701	.0088	0051	!	00.	2.968	.0031	0153	-	39.2*
•	19.386		1040.	••	00.	016.44	.1433	.0270	••	00.	47.386	.0929	.0379	••	16.0
•	12.087		.0654	••	00.	27.476	.2393	.0447	••	00.	37.688	1516	.0543	••	8.0
	5.464	.2259	.1065	••	00.	12.056	.2873	.0741		00.	21.898	.1809	.0780	••	4.0
~	BU*100	DTH/D2	ZQ/NQ		RI	BU*100	DTH/D2	20/00	••	RI	BU*100	DTH/02	20/00	••	
~	4.3	01.	3.23		1.7	8.7	05	2.31		1.4	2.9	14	2.27		48.0
~	4.7	.80	2.86	••	1.5	8.3	06.	2.07	••	1.8	4.1	.14	1.87	••	32.0
-	5.4	04	2.33	••	1.2	7.5	62	1.71	••	5.6	7.2	18	1.34	••	16.0
_	6.3	-1.71	1.90		1.0	6.9	-2.30	1.42	••	3.7	12.9	-1.85	96.	••	8.0
	7.3	-2.54	1.55		8.	6.2	-3.37	1.18	••	5.4	22.9	-2-	69.	••	4.0
	8.4	-3.00	1.26		.7	5.7	-3.97	86.	••	7.8	40.8	-2.88	.50	••	2.0
	9.6	-3.25	1.03	••	9.	5.2	-4.28	.81	••	11.3	72.7	-3	.36	••	1.0
=	(DEG)	3	(N/S)		(DEG)	(DEG)	3	(M/S)		(DEG)	(DEG)	3	(M/S)		HEIGHT (M)
S	SIGA	TEMP	MS.		SIGE		TEMP	SM	••	SIGE	SIGA	TEMP	NS	••	
												DATA	FITTED (	ES	LEAST SQUARES FITTED DATA

HEATHER  TEMP DEG C -3.3  TEMP DEG C -7.8  VISIBILITY (MI) 85  LOW MID 8 HI 2 TOTL 10:LOW MID 10 HI TOT 10		••	DATE	DATE 16/03/77		TIME 08:00:00		DATE	: DATE 16/03/77		TIME 09:00:00	: 00:0
TEMP DEG C -3.3 : TEMP DEG C -7.8 : DEW POINT DEG C -7.8 : VISIBILITY (MI) 85 : VISIBILITY (MI) 70 : LOW MID 8 HI 2 TOTL 10:LOW MID 10 HI TOT		••		MEAT	HER		•		WEAT	HER		••
: DEW POINT DEG C -10.0 : DEW POINT DEG C -7.8 : VISIBILITY (MI) 85 : VISIBILITY (MI) 70 : LOW MID 8 HI 2 TOTL 10:LOW MID 10 HI TOT		••		TEMP D	2 93	-3.3	•	••	TEMP D	EG C	3	••
VISIBILITY (MI) 85   VISIBILITY (MI) 70		••	DEM	POINT	2 93	-10.0		. DEW	POINT D	EG C	-7.8	••
COM   MID   8 HI   2 TOTL   10:LOW   MID   10 HI   TOT		••	VISI	BILITY	(MI)	85		. VIS	IBILITY	(IW)	02	••
: LOW MID 4880 HI 7620 : LOW MID 4880 HI  : A= -21 B= .31 P= .33	LD (TENTHS)	:	MO.	MID	8 HI	2 TO	TL 10:	LOW	MID	IH 01		L 10:
A = -21 B = .31 P = .33	LO HT (M)	••	101	IN	D 486		7620	HOT :	IN	0 488	IH 0	••
1.81 MW/CM2	XPONENTS	••	A=	.21 8=	.31 P=	3		: A= -	-23 8= -	.55 P=	.20	••
NO.: (4M) .13* (8M) .38*(16M) 1.77: (4M) .06 (8M) .29(16M) .13* (39.192M) 6.12 (0BSERVED .16M) .26 (0BSERVED DATA): (39.192M) 6.12 (0BSERVED .16M) .26 (16M) .267: (4M) .30 (8M) 1.96 (16M) .126 (16M) .1267: (4M) .1253 (8M) .0821 (16M) .1267: (4M) .088* (8M) .076* (16M) .0287: (4M) .1253 (8M) .0821 (16M) .1267: (4M) .088* (8M) .076* (16M) .0287: (4M) .1253 (8M) .0821 (16M) .1266 (16M) .1267: (1	LION	••		.1	81 MW/	CM2			4.	14 MM/	12	••
: (39.192M) .26 (OBSERVED DATA): (39.192M) 6.12 (OBSERVED : (4M) .92* (8M) 3:12*(16M)30.54: (4M) .30 (8M) 1.96 (16M) : (4M).088* (8M).076* (16M).0287: (4M).1253 (8M).0821 (16M) : (4M).088* (8M).076* (16M).0287: (4M).1253 (8M).0821 (16M) : (16G) (MS) TEMP SIGA SIGE: WD MS TEMP SIGA : (16M) MS TEMP SIGA : (16G) (M/S) (C) (DEG) (DEG) (M/S) (C) (DEG) : (170* 1.21 -4.27	2	**	( HT)	13* (8	1M) .38	3*(16M)	1.77	(4H)	8) 90.	M) .2	119116	1.51 :
: (4M) .92* (8M) 3.12*(16M)30.54: (4M) .30 (8M) 1.96 (16M) : (4M) .088* (8M) .076* (16M) .0287: (4M) .1253 (8M) .0821 (16M) : WD		••	(39.1	192M1	26 ( DE	SSERVED	DATA	: (39.	192M1 6.	12 (08	SERVED	DATA):
: (4M).088* (8M).076* (16M).0287: (4M).1253 (8M).0821 (16M)  : WD WS TEMP SIGA SIGE: WD WS TEMP SIGA  : (DEG) (M/S) (C) (DEG) (DEG): (DEG) (M/S) (C) (DEG)  : 179.		••	(4M)	92* (8	IM) 3.1	12*(164	130.54		.30 (8	9.1 IM	1H91) 9	22.30:
: WD WS TEMP SIGA SIGE: WD WS TEMP SIGA :(DEG) (M/S) (C) (DEG) (DEG):(DEG) (M/S) (C) (DEG) : 179. 1.21 -4.20 5.5 : 173. 1.72 -1.20 7.2 : 170. 1.65 -4.10 4.4 : 165. 2.00 -1.29 6.5 : 171. 2.37 -3.48 2.8 1.8: 164. 2.25 -1.33 5.8 : 172. 3.40 -1.58 3.2 .6: 163. 2.64 -1.36 4.4 : 183. 2.6630 2.1 1.4: 181. 2.9833 3.7 : 17727 3.8		••	(4H).	088* (8	M) . 076	W91) *9	0.0287		.1253 (8	M) . 082	1 (16M)	.0319:
: (DEG) (M/S) (C) (DEG) (DEG): (DEG) (M/S) (C) (DEG)  : 179.			9	N.S.		SIGA		OM :	MS	TEMP	SIGA	SIGE :
: 179. 1.21 -4.20 5.5 : 173. 1.72 -1.20 : 170. 1.65 -4.10 4.4 : 165. 2.00 -1.29 : 171. 2.37 -3.48 2.8 1.8: 164. 2.25 -1.33 : 172. 3.40 -1.58 3.2 .6: 163. 2.64 -1.36 : 183. 2.6630 2.1 1.4: 181. 2.9833 : 177.	HEIGHT (M)	::	0EG)	(M/S)		(DEG)		(DEC)	(M/S)	3	( DEC )	(DEG):
: 179. 1.21 -4.20 5.5 : 173. 1.72 -1.20 : 170. 1.65 -4.10 4.4 : 165. 2.00 -1.29 : 171. 2.37 -3.48 2.8 1.8: 164. 2.25 -1.33 : 172. 3.40 -1.58 3.2 .6: 163. 2.64 -1.36 : 183. 2.6630 2.1 1.4: 181. 2.9833 : 177177.	1.				-4-27					-1.22		
: 170. 1.65 -4.10 4.4 : 165. 2.00 -1.29 : 171. 2.37 -3.48 2.8 1.8: 164. 2.25 -1.33 : 172. 3.40 -1.58 3.2 .6: 163. 2.64 -1.36 : 183. 2.6630 2.1 1.4: 181. 2.9833 : 177177.	2.	••	179.	1.21	-4.20		•	173.	1.72	-1.20		••
: 171. 2.37 -3.48 2.8 1.8: 164. 2.25 -1.33 : 172. 3.40 -1.58 3.2 .6: 163. 2.64 -1.36 : 183. 2.6630 2.1 1.4: 181. 2.9833 : 17717727	+:	••	170.	1.65	-4.10		•	: 165.	2.00	-1.29		••
: 172. 3.40 -1.58 3.2 .6: 163. 2.64 -1.36 : 183. 2.6630 2.1 1.4: 181. 2.9833 : 17717727	.8	••	171.	2.37	-3.48		1.8:		2.25	-1.33		4.6:
: 183. 2.6630 2.1 1.4: 181. 2.9833 : 17727	16.	••	172.	3.40	-1.58		9.		2.64	-1.36		3.4:
: 17717 3.5 3.0: 17727	32.	••	183.	2.66	30		1.4:		2.98	33		1.5:
	48.	••	177.				3.0			.27		2.1:

DATA	
FITTED	
SQUARES	
LEAST	

		••	••	••	••	••	••		! "	••	••	••
SIGE (DEG)	14.1	9.6	9.9	4.5	3.1	2.1	1.7	R.	00.	00.	00.	00.
SIGA (DEG)	8.7	7.4	4.9	5.4	4.7	4.0	3.6	BU+100	.212	066.	5.119	27.242
TENP (C)	-1.28	-1.28	-1.28	-1.26	-1.13	59	.36	DTH/02	.0144	.0222	.0378	.0475
WS (M/S)	1.50	1.73	1.98	2.27	2.61	3.00	3.25	20/00	.0913	.0524	.0300	1910.
		••	••	••	••	••				••	••	••
SIGE (DEG)	9.		6.	1:1	1.3	1.7	1.9	A.	00.	00.	00.	00.
SIGA (DEG)	5.6	6.4	4.2	3.6	3.2	2.7	2.5	BU* 100	4.118	091.6	16.936	21.324
TEMP (C)	-4.49	-4.28	-3.88	-3.14	-1.88	25	.17	DT H/02	.2007	.1772	.1303	.0394
(M/S)	1.06	1.34	1.68	2.12	2.67	3.36	3.84	20/00	.1302	6180.	\$150.	.0737
		••	••	••	••	••	••	-		••	••	••
HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0		4.0	8.0	16.0	39.2*

OBSERVED DA	DATA																					
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON ND. (1/L)*10 USTAR		DEW VIS ON VIS (14M) (4M) (4M)	16/03/ TEMP POINT RILITY MID MOS B= 7 49 ( 92M)**	/40 × 2 /0#20	HEP HEC CO CO CO CO CO CO CO CO CO C	ME 10 -8. 70 80 HI = .1 42(16 42(16 85 ERV 89 (11 87 (11	10:00:00 3.5 8.2 10TL 115 16M)-3.5 16M)-3.5 (16M)-2.5	10:00:00 3.5 9.2 HI • 15 16M)-3.55 RVED DATA) (16M)-2.34 (16M)-731	 DEW NISIE WAY NI	16/03/77 VEATHER TEMP DEG POINT DEG (BILITY (MI MID 10 MID 126 R= 15 11.58 -2.02 (8M)-1382 (8M)-1382 (8M)-1382	MP DEG C NT DEG C ITV (MI) ID 10 H MID 4. B= 15 11.58 M 2 (8M)-6	TIME C C C C C C C C C C C C C C C C C C C	11: -0-7 -0-4 -0-7 -0-7 -0-7 -0-7 -0-7 -0-7	-18 -18 -11	10 I I I I I I I I I I I I I I I I I I I	OPTE VISI VISI (4M) (4M)	16/ POIT N M 16/ 10/ 10/ 10/ 10/ 10/ 10/ 10/ 10/ 10/ 10	177 CMT CMT 10 10 10 10 10 10 10 10 10 10 10 10 10	1 ME 35 35 98 ( 085 E 098 ( 095 E 098 (	2:03 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	1:00 1 10 1 10 98 1 10 4 10 4 10 10 10 10 10 10 10 10 10 10 10 10 10	
HEIGHT (M)	::	WD (DEG)	WS (M/S	WS /S)	TEMP (C)	SI (DE	SIGA DEG1	STGE (DEG)	 WD DEG )	WS (W/S)	E 0	dh c	SI3A DES)	STG (DE	B : (6)	WD LDEG)	WS (W/S)		5 4	S IGA	CDEG)	
1. 2. 4. 8. 16. 32. 48.		125. 120. 127. 141. 143.	,	45 75 45 98 98	246739		26.6 27.0 19.9 20.9 24.6 22.4	16.3: 25.5: 22.5: 20.3:	 16. 6. 357. 356.	1.00		41 41 25 25 16 73	30.72	2 2 2 7 19.1: 9 21.8: 6 26.9:	182.6	322. 313. 312. 308. 310.	2.50 2.50 2.55 2.55 2.69 2.85		55 55 35 19 78 52	10.4 10.4 9.5 7.7 9.3	5.9: 7.0: 8.5:	1
LEAST SQUARES HEIGHT (M)	ES	FITTED WS (M/S)	D DAT	41		S IGA		SIGE DEG)	 WS)		TEMP (C)		SIGA DEG)	SIGE (DEG)	 w =	3 1	WS M/S)	TEMP (C)	SIGA (DEG)		SIGE DEG1	1 1
1.0			.58	1.95		26.3		15.3	 .90		3.42	53	2.5	13.9		2.5		4.57	11.4	+ 60	4.1	
4 8		. ' - ' -	12.	1.82		24.6		17.6	 1.01		3.37	37.		17.1		200		4.44	00		6.0	
16.0 32.0 48.0			.03	1.68		23.0		20.3	 1.08		3.16 2.93 2.74	26.0 21.7 19.6		23.4		300	2.70	3.45	88.7		7.6	1
	•	20/00		OT H/ D2	Œ	U* 100		3.1	 20/00	DTH	DTH/DZ	80*100	001	8	••	20/00		PTH/DZ	80*160		1 0	
4.0 8.0 16.0 39.2*			1 11	0079 0071 0054 0056	1396	. 890 . 601 . 818	1 1 10 1	37 -3.17 22.85 78.22	 .0120 .0062 .0032	- 008	200	492 -1.615 -4.426 20.194	92 15 - 26 - 94-16	2.80		.0551 .0296 .0159	1 1 1 1	0292	299 859 -1.741 000		2,42	1 1
* 08	3SER	OBSERVED DA	DATA																			

		DATE 1	19	16/03/77 WEATHER	7 HER	TIME		3:00	13:00:00		DATE	-	6/03/77 WEATH	IL	A 11 ×	+1 HW	00:00:51	00	
		DEM	POINT	DC.	DEG C	UU <u>-</u>	7.4 -9.4	**			DEW	-	POINT	DEG	00	9.1	-0		
CLD (TENTHS)	. :: .		3	-	0	HF 4270		T0TL	بے	10:1	101		CIM	-	HI 4270	H	TOTL	01 .	
C 3		A=0	~	8=	•14 • 8			600			Α=	02	a -	.02		3	5		
-		=	.21		(8M)		.63(16M)		-1.35		(44)	-6-			-18.6	(84)-18.6 (16M)		-29.0	
(1/L)*10 USTAR		4 ( W ) .	60	1	SM)	3004				- 90:	45.	-16.9			M) -24.4	222		-19.0	
		03	1	MS.	1.8	EMP	\$164	45	SIGE		GA.		- KS	1	EMP	SIS	1 4	SIGE	! "
HEIGHT (M)	:	DEG.	2	M/S)	5	3	OE	EG)	(DEG)	3:15	(DEG)	-	2	•	(0)	(DEG)		(DEG)	
1.						.34									6.30				
2.	••	351.	m	.33	41	5.22		7.8		••	359		5.99		91.0		6.01		••
•	••	342.	m	.62	4 .	. 89		4.1	L	•• :	350.		3.25		5.02				• •
	., ,	346.	0 4	2.80	, ,	7.		200	ט ע	5.00	357		3.26		3.64		2.5	33.0	* *
32.		338.	4	.22	4	4.40		4.9	2	6	353		4		2.65		8.9	30.0	
48.		350.			4	4.18		8.0	7	.3:	345.		3.69		5.21	01	-	5.6	:: !
LEAST SQUARES		FITTED		DATA		£ 14									7 3 7				!
		MS		-	EMP.		SIGA		SIG			MS		TEMP	•	SIGA		IGE	••
HEIGHT (M)		(M/S	-				0FG1		1950		-	MISI		3	-	0561	-	0661	!
1.0		3.16	8	5	.19		7.6		3.9	••		3.00		6.68		9.01			••
2.0		3.3	11	S	119		1.5		4.3	••	141	3.10		14.9		10.4			••
4.0		3.58	.58	5	5.06		4.1		4.8	•••	,	3.21		. 90		10.3		5.3	•• •
0.8.		200	2 5	* 1	06.4				2.0			15.5		. 60		- 0			
32.0		4.2	-	4	30		7.1		6.3		, (	24		90		0.00			
48.0		4.4	.3	4	4.22		7.1		6.7	••	, 111	3.61		5.05		9.7			••
JACA		DU/DZ	1 1	DT H/ D7	20.	90	BU* 100		-	-	2G/NO	70,	DTH	107HT0	B	BU*100		-	!
6.4		.0708		.0304	4	i	.134		.05	••	0.	.0350	2247	47	-1-	228	•	.12	••
8.0		.0376	1	.025	23	i	.397		17	••	0.	181	1734	34	-3.	3.503		. 65	••
16.0		.0199		.0152	20	1 -	845		7.00		000	.0093	0709	60	75.	184.6-	1	4.26	
23.46	. !	710.	1		1		, ,	1		. !		1	:	3 !		-	-		٠!

4
-
4
0
0
-
>
~
SE
08
0

. 9	333	E :	••	••	••	.6	.7.	.3:	5.3:
0:	PA TA	TEMP SIGA SIGE : (C) (DEG) (DEG):				4	4	•	2
17:00:00 10.0 113.9 7 TOTL	0 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1	₹5 6		10.3	1.6	9.0	8.9	7:1	6.7
A 112	70 H 70 H 18(1) 18(1) 26 (	SI							
Facosi	0 € 10 10	CC	8.4	8.44	8.2	8.2	8.1	7.9	7.7
WEATHER MP DEG NT DEG ITY (MI	0 . 1			1	*	3	1		7
6/03 TEMP OIN	3 B B B B B B B B B B B B B B B B B B B	WS (M/S)		2.27	2.5	2.1	2.5	3.1	3.1
::00 : DATE 16/03/77 TIME 17:00 :	3 E 6 E E			32.	*	.6	2.	2.	;
0 O NO		E E							
9	52 (TA) .01	SIGE : WD (DEG)				5.8	.0.9	9.9	7.2
:00:0 0 8 TOTL	1-022			0	1	9	2	+	3
16: 10.0 12.8 1	H1 .08	TEMP SIGA		6	8.7	7.	7.	•	•
1 H	MID 3660 H  - 12 P = .  9.07 MW/CM2 (8M) - 68(1 (8M) - 91 (	9	38	8.27	10	90	.78	55	18
HER EG C EG C EG C	22422	F 2	80	æ	æ	1.	-	-	7
WEATHER WEATHER MP DEG NT DEG ITY (MI	MI 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	WS (W/S)		3.16	.51	. 78	.92	.05	.07
16/ TE POI 181L	2 192M	=		~	3	3	•	4	4
: DATE 16/03/77 TIME 16:00:00 : WEATHER : TEMP DEG C 10.0 : DEW POINT DEG C -12.8 : VISIBILITY (MI) 70 10:LOW MID 10 HI TOTL	LDW MID 3660 HI :	SIGE: WD (DEG):(DEG)		13.	2.	•	3.	8	5
			••	••	••		5.8:	2:	:0
00:	98 DATA): 65:	SIGE				5	Š	5	•
ME 15:00:00 8.9 -11.7 70 TOT		SIGA (DEG)		1001	0.0	.3	3.6	9.0	2.3
8.9 -11.7	70 HI 70 MZ 70 MZ 45(16 45(16 61 (1	SIC		7	=				•
Fauna	427 MW / WW / COB	TEMP (C.)	7.02	6.93	6.76	6.57	6.38	6.15	5.91
WEATHER ME DEG NT DEG ITY (MI	MID 42 01 P 9.07 MW (8M)			•					
DATE 16/03/77 1 WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI)		WS (W/S)		3.1	3.54	3.87	4.18	4.32	4.3
E 16	A=16 B= (4M)15 (4M)43 (4M)43 (4M)43								
DAT		: WD		9	7	-	e	80	2
	zo	!	**	••	••	••	••	••	••
CLD (TENTHS)	CLD HT (M) EXPONENTS NET RADIATION: RICHARDSON NO.: (1/L)*10 USTAR	HEIGHT (M)							
E S	HT (M) ONENTS PRADIATIO HARDSON N (1/L)*10 USTAR	GHT	-	7	4	œ	16	32	48
9	CLD HT (M) EXPONENTS NET RADIAT RICHARDSON (1/L)*1 USTAR	HEI							

		ľ
-		
	d	ľ
C		)
c		•
5	Ļ	•
		•
		•
-	L	
4	,	١
L	ı	j
TOTION	ž	•
	i	,
	ì	i
7	i	
:	ż	
•		•
٠		
·	,	ı

HEIGHT (M)		WS (W/S)	TEMP	SIGA (DEG)	SIGE (DEG)		MS (M/S)	TEM (C)	SIGA (DEG)	S16E (0EG)		WS (H/S)	TEN C	\$ \$16A (0EG)	S16E (DEG)
-		3.07	1	12.2	5.9	-	3.11	8.25	6.6	4.4		2.18		11.4	1.4
	••	3.29	68.9	6.01	5.9	••	3.28	8.21	9.1	4.8	••	2.34		10.4	4.3
	••	3.52		9.6	5.9	••	3.46	8.14	8.4	5.2	••	2.51		9.5	4.4
	••	3.77		8.7	5.8	••	3.65	8.01	7.8	5.7	••	2.69		8.7	4.5
	••	40.4		7.8	5.8	••	3.85	7.78	7.2	6.2	••	2.89		8.0	4.7
	••	4.33		7.0	5.8	••	4.06	7.46	9.9	6.7	••	3.10		7.3	4.8
	••	4.51		9.9	5.8	••	4.19	7.35	6.3	7.1	••	3.23	7.75	7.0	4.9
		20/00	DTH/02	80*100	R.I.		20/00	DTH/02	80*100	R.		20/NO	DTH/D2	BU*100	<u>.</u>
			0285	129	10		. 0615	0243	113	+0	-	.0592	0059	052	03
	••	.0435	0240	378	22	••	.0324	0205	343	14	••	.0318	0053	162	09
16.0	••		1510	831	80	••	. 1110.	0127	768	50	••	1710.	0040	429	24
	••		0050	-1.429	84	••	. 6100.	0050	-1.628	-1.21	••	0006	0038	-2.056	-1.85

	•		
	۲		
4	į	į	ľ
	Ľ		1
	Ī		
1	c		
	Ų		
1			
-	Ų	١	į
1	Ų		1
-	Ö	į	1

	. DA	: DATE 16/03/77	03/17	=	ME 18:00:00		DATE	: DATE 16/03/77	7 TIM	TIME 19:00:00		DATE	: DATE 16/03/77		TIME 20:00:00	: 00:
			WEATHER					WEATHER	HER		••		WEATHER			
	••	TE	MP DEG	ပ	8.4	••		TEMP DEG C	) EG C	1.9	•		TEMP DEG C		9.6	••
	•	DEW POINT DEG	NT DEG	ں	-11.1	••	DE M	POINT D	EG C	89		DEM	POINT D		-8.9	••
	>	VISIBILITY	Ξ	11 7		••	VISI	VISIBILITY (MI)	(MI)	30	••	VISI	VISIBILITY (MI)		0	••
	107:		MID 3	3 HI	5 TOT	8	10M	MID	3 HI			10:COM	MID	Ŧ	TCT 01	10:
=	. LO	3	MID	3660	3600 HI 099E	••	101	MID		3660 HI	7620 :	. COM	MID		HI 7620	520 :
EXPONENTS	. A=	A=47 B=-1.06 P	8=-1.0	=d 9	.38	••	A=	A=60 8=43	.43 P=	.52	••	A=	.11 8=	.88 P=	91.	
NET RADIATION			-5.09	MW/C	12	••		-7-	26 MW/	CM2			-5-	79 MM/C	M2	
RICHARDSON NO.		0. (M+)	. (MB) 90.	.12	.12(16M)	. 20 :	(H+)	.23	(8M) .38(16M)	8 ( TOW)	: 14.		.54* (8	M) 6.16	(16M)1	0.53 :
		139.1924)	1 .36 (0	1085	BSERVED DATA):	ATA1:	(39.1	(39.192M) 1.	1.80 (08:	SERVED	(OBSERVED DATA):		(39.192M1-3.12 (OBSERVED DATA	12 (085	(OBSERVED DATA)	DATA! :
(1/1)*10	+) :	M) .2	9 (BM)	***	(16M)	:15.	( M+)	2.55 (8	IN) 3.1	M91) 5	2.40:	( + H)	12.3*(8	# **** ( W	(16M)	: ****
USTAR	* :	(4M).1430	0 (8M)	.1444	(164)	1479:	( 4H)	(8M).1444 (16M).1479: (4M).0624 (8M)	M) .065	M91) 4	.0657 (16M), 0796:	(H+)	(4M), 0594*(8M), 0076 (16M), 0051:	M).0076	(16M)	.0051:
	3		T SM	TEMP	SIGAS	: 39I	9	MS	TEMP	SIGA	SIGE :	3	MS	TEMP	SIGA	SIGE :
PEIGHT (M)	: ( DEG )		_	-	(DEG) (	(DEG): (DEG)	( DEG )	(N/S)	3	( DEG	(DEG): (DEG)	(DEG)	(N/S)	(C) (DEG)		(DEG):
1.1				6.55		"			2.77					=		
2.	. 3		.11	6.73	8.9	••	135.	66.	3.42		••	23.	1.34	1.08	8.3	•
+	: 2		.26	6.13	5.5	••	110.	1.41	3.93		••	223.	2.16	2.68	5.5	••
		16. 2	2.83	1.08	0.4	3.3:	.16	1.99	4.92	12.7	3.5:	222.	2.62	5.17	5.1	1.0:
16.	1 :		.84	1.41	3.1	2.5:	83.	3.33	5.84		2.1:	209.	2.53	5.68	6.9	1.0:
32.	. 2		91.	7.70	1.9	1.2:	76.	4.49	6.15		.6.		2.60	5.74	8.8	2.2:
.84	. 2		19.	7.67	1.5	.5:	70.	4.79	6.88		2.2:		2.48	2.50	10.0	4.7:
LEAST SQUARES FITTED DATA	S FI	TTED D	ATA													
	-			-		-			-	-	-	-				-

SIGA SIGE : WS	SIGE :	SIGE :	••	SM :	MS		TEMP	SIGA	SIGE	••	MS	TEN	P SIGA	A SIGE	
			(DEG)			(M/S)	3	(0EG)	(DEG)	. !	(H/S)	3	-		-
-	-	-	36.7 :	••		.70	3.17	39.0	7.2		1.52		5.5		**
7.2 17.6 :	_	_	: 9.71	••		1.00	3.39	25.8	5.3	••	1.70	1.54	6.0	.2	••
			8.4 :	••		1.44	3.80	17.0	3.9	••	1.90		4.9	*	••
-	-	-	. 0.4	••		2.07	4.56	11.2	5.9	••	2.13		6.9	8.	••
			1.9 :	••		2.97	5.78	1.4	2.2	••	2.38		1.4	1.4	••
_	_	_	. 6.	••		4.27	7.05	4.9	1.6	••	2.66		8.0	2.6	••
•	•	•	. 9.	••		5.28	6.16	3.8	1.4	••	2.85		8.4	3.7	••
# 100 RI :	8U*100 RI :		R.I. :		!	20/00	0TH/02	80*100	A.		20/00	DTH/02	90+100	D RI	-
			. 00		•	.1778	.2052	5.624	00.		.0716	.3432	5.415	00.	
. 230 .00 :	1.530 .00 :		. 00.	••		.1278	.1748	9.244	00.	••	1040.	.2789	13.983	00.	••
			. 00.	••		6160.	.1139	11.604	00.	••	.0224	.1504	23.904	00.	••
			. 00.	••		.0188	1810.	4.556	00.	••	0075	0050	-4.164	-21.72	••

CBSERVED	CATA												
CLD (TENTHS) CLD HT (M) EXPCNENTS NET RADIATION RICHARDSCN NO (1/L)*10 USTAR		CATE 16/03/7  MEAT  TEMP D  TEMP D  VISIBILITY  LOW MID  LOW MID  A = .21 B = .5.  (4M) .211*(8  (4M) 2.21*(8  (4M) 1.28*(8)	HERE TANK	1 000 H 4 1 6 0 6 9 9	2.8 -10.5 20 10 TOTL 10:1 HI 7620:1 7*(16M) 4.40:1 85ERVED DATA):00*(16M):0168:	DATE 16 DEW PO VISIBIL LOW A=04 (4M) (39.192 (4M)	MEATHER MEATHER INT DEG INT DEG INT DEG INT DEG MID B= .43 -3.63 40 (8M) N) .72 02 (8M) .12	TIME CCCC HI 1 PE MW/CM 0876 C0856	22:00:00 :: 2.8 8.9 0. TOTL 10: HI 7620 :: 32 2 16M) 1.43 :: RVED DATA): (16M) 20:12:	DATE I	L6/03/77 T L6/03/77 T TEMP DEG C POINT DEG C BILITY (MI) MID MID 03 B= .46 -3.63 M 2.205*(8M) 1 2.10*(8M) 1 0.91*(8M) 1	H H H H H H H H H H H H H H H H H H H	3.4 -8.9 20 10 TOTL 10 HI 7620 .17 CM2 *(16M) 6.90 SERVED DATA) 4.*(16M) *******
HEIGHT (M)		: WD	WS TEM (M/S) (C)	TEMP SIGA	SIGE :	(DEG)	WS TE	MP SIGA	SIGE :	(DEG)	WS TE	EMP SIGA	\$16E (DEG)
1.6. 8.9.2.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.		143. 132. 127. 122. 119.	2.00 2.84 1 3.77 3 3.95 4 4 3.49 4 4	53 6.4 1.86 5.5 3.57 6.8 4.94 9.8 4.95 11.2	22.1	185. 179. 179. 175. 182.	1.45 1 2.25 2 2.70 3 3.51 4	34 6.3 63 5.2 63 7.1 44 8.1 25 4.2	1.52	190. 184. 184. 173.	22.01 2.01 2.01 2.01 2.01 2.01 2.01 2.01	1.18 1.56 11.9 2.12 11.9 3.55 8.6 4.80 9.9 5.09 14.8 5.01 11.5	3.00
LEAST SQUA	SQUARES :	FITTED CATA	DATA TEMP (C)	SIGA (DEG)	SIGE :	WS (M/S)	TEMP	SIGA (DEG)	SIGE :	HS (M/S	TEMP (C)	SIGA (DEG)	SIGE (DEG)
2.00		2.43		4 N Q	400	1.17		8.00	N. 0. 80	2.1	1.69	10.5 10.8 11.0	9.6.2
8.0 16.0 32.0 48.0		3.07 3.45 3.88 4.15	2.60 4.32 5.78 4.63	6.4. 10.0	3.6 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2.25	3.33	6.66 6.08 6.08 7.08 7.08	2.5	2.23	w 4 m 4	11.7	3.2
	"	20/00	DTH/02	BU* 100	۳. 	70/00	DTH/DZ	80*100		Z0/N0	DTH/D2	8U*100	ı a
8.0 16.0 39.2*		.0501	.2958 .2447 .1425	2.270 5.916 10.828 4.266	0000	.0827	.1982 .1677 .1068	3.450 7.526 12.335 8.006	8888	.0437	.2395 .1991 .1181	3.458 9.065 16,933 4.153	8888
*	OBSERVED	RVED DATA	4										-

	: DATE		17/03/77	TIME		00:00:00		DATE 17	17/03/77	TIME	00:00:10	00:0	••	DATE 1	17/03/77		TIME 02:	05:00:00
			MEATHER	~					WEATHER	~			••		WEATHER	HER		
		TEMP	4P DEG	J	2.8		••		TEMP DEG	3	3.5		••		TEMP D	DEG C	0.0	
	: 0E	POIN	IT DEG		-8.9			0		J	-8.9		••	DEW P		DEG C	-8.3	
		SIBIL	VISIBILITY (MI)	2	20			VISIBI	~	11 2			••	VISIB	_	CHI	20	
	:10M	I	MID	Ŧ	10 TO	TOT 10	01:0	MO	WID 9	Ħ	1 TOTL	1 7	0:1	MO	MIO	DH 6	-	TOTL
CLD HT (M)	*07 :		MIO			7620		TOM	MID	3050	H	7620	••	LOW	MID		HO	7620
CNENTS	. A=	.24 B	B= .85	5 P=	.21			A= .13	8= .28	8 P=	.29		••	:	-8 60	4 14.	P= .21	
NET RADIATION	••		-4.74	H	CM2		••		16.9-	MW/CM2	12		••		+	.33 MM	MW/CM2	
	:	•	10* (BM)	. 23	* ( 16M)			-	39 (8M)	.88	.88(16M)	1.55	••	1 (H4)	-		3.50(16M)	
		192	1 .15	0	SERVED		:	-	=	-	RVED	DATA	:	-	-		(OBSERVED	O DATA!
(1/1)*10	( 4H)	*09.	( 8H)	10.4	* (16M	4* (16M)80.72		4M1 6.	1(M8) 72.	19.61	(16M)	23.	43:	(4M)82.66	-	*	91) ****	(16M)****
USTAR	: (+M).	1.109*	(8M)	.130*	(16M	1.0198		4M) .06	0671 (8M)	.0465	(164)	.0360	:0	(4H).0	.0225 (8	8M) .011	19 (16M)	M) . 0090
	9		WS TE	TEMP	SIGA	SIGE		Q.	MS T	TEMP S	IGA	SIGE		9	MS.	TEMP	SIGA	SIGE
HEIGHT (M)	: ( DEC )	3	_	1 (3)	056)	(DEG	DEG1: ( DEG	_	H/S)	-	1990	(DEG)	=	DEGI	(N/S)	3	-	
1.				.83						21						1.27	1	
2.	: 286.	-	.46		10.4			299.	1.48	.27	12.5		••	329.	1.10	15		3
4.	: 275			1.49	7.2			288.	2.09	-89			••	304	2.12	1.99		1
. 8	: 270			2.59	6.3			286.	.72	2.13	11.2	2.		298.	2.35	3.3		8 1.0
16.	: 263			3.57	7.3			287.	.21	2.81	12.4	3.6		296.	2.34	3.48		
32.	: 263		3.25	3.98	12.0			298.	3.55	3.52	16.5	4.0		298.	2.59	3.43	3 5.8	1.7
48.	: 251			3.95	24.9			304.	.87	3.92	18.9	*	.8:	299.	2.47	3.2		
LEAST SQUARES	ES FIT	FITTED DATA	ITA								18 V							
		SM	TEMP		SIGA	SIGE		MS	TEMP		SIGA	SIGE	••	MS		TENP	SIGA	SIGE
FEIGHT (M)	: :	18/	3	-	DEG	(DEG)		(N/S)	3	-	DEG) (	DEG	••	(N/S)		3	(DEG)	(DEG)
1.0		1.56	1.01	2	9.	.2		1.35	61.	9.	6	1.6	••	1.27		90.	7.6	*
2.0	••	1.80	1.21	•	1.1	*	••	1.64	.39		6	1.9	••	1.47		.36	7.1	.5
4.0		5.09	1.58	1	6.			2.01	.79		6	2.3	••	1.70		.93	6.7	-
8.0		2.45	2.27	6	+.1	1.3	••	2.46			-	2.8	••	1.96		+6	6.3	6.
16.0		2.80	3.35	11	7.	2.3		3.01			3	3.5	••	2.26	6 3.45	45	6.5	1.2
32.0		3.24	4.35	-	-:	4.1	••	3.67	3.97		1	4.2	••	5.6	*	.41	9.6	1.6
48.0	••	3.53	3.82	-	4.5	2.1		4.13	3.75	16.	9	4.7	••	2.8	5 2	18.	2.4	1.8
	. 00	0 70/00	DTH/D2	BQ.	*100	R.I		20/00	DTH/02	80*100	00	R.		20/00	DTH/D2		001 ±08	2
4.0			.1869		144	00.		.1356	9861.	2.812	2	00.	••	.0819		6	5.429	.00
8.0			1569		111	00.		.0829	1691.	6.411	1	00.	••	.0473		-	13.091	00.
16.0	034		8960.	11.2	203	00.	••	.0507	8111.	11.259	6	00.	••	.0274			20.457	00.
**																		

CBSERVED DATA	Y																		1
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO.	4 0 10 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	E 1 2 1 2	MAGHTO HI	9 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-0.1 -9.5 20 1 TO 0 HI CM2 CM2	7620 1.54		TE SI SI	177 THER DEG DEG 10 10 10 10 10 10 10 10 10 10 10 10 10	TIME C -1 ) 20 HI 3050 PE MW/CM	4:00 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	00:		M 32 1 -	F # 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	- TOUTINGE	5:00     	100 L	
USTAR USTAR HEIGHT (M)		2201	inn	25.01 EE 1012	46 (16M 92 (16M S1GA (DEG)	2.1.2			(8M) (8M).	4.09 0630 MP S	! "	7.97 .0483 SIGE			S S S S S S S S S S S S S S S S S S S	. i w .	!	. 2858 . 2858 SIGE	
1. 4. 8. 32. 48.	MMM 744		.68 .94 1.31 1.75 2.14 2.70	1.99 2.48 2.59 2.59			22222		200040	2222427	1 200-2001	3.22	1 00 00 00 00 00 00 00 0			2252418	i senes		1
LEAST SQUARES			DATA					3				1							1 .
HEIGHT (M)	]	(M/S)			DEGI	(066)		(N/S)	50	(DEG)	-	DEG		(¥/\$)	53		95 C	DEG)	1
2.000		.52			56.6 38.4 26.1 17.7	2.5		1.06	1.31	9.5				3.39	2.93	0 - 0.4		8 4 4 4	
16.0 32.0 48.0		1.69 2.26 2.68			12.0 8.2 6.5	4 4 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		3.37	2.45 3.28 3.71	7.1	-00	. 4 .		6.75 8.02 8.87	3.46			3.0	
		20/00	DTH/DZ	80	04100	RI		20/00	DTH/D2	80*100		RI		20 / 00	DTH/D2	BU*100		RI	
4.0 8.0 16.0 39.2#		0930 0623 0418 0350	.15 <b>44</b> .1282 .0758	2824	. 023 . 487 . 253 . 174	8888		.1312 .0827 .0522 .0087	.0913 .0835 .0681 .0437	1.843 4.237 8.663 19.739		8888		.2760 .1640 .0974 .0656	.0605 .0535 .0397	.150 .377 .790 .1325		8888	1
* 08	OBSERVED	ED DAT	FA																1

	:: 15	1	! " " !		1 . 1
1 M40	- 100	7.6.2	\$16E (DEG)	5.4.6.1.6.1.7.1.7.1.7.1.7.1.7.1.7.1.7.1.7.1	RI .000 1.69
2.8 -5.5 20 TOTL 050 HI 050 HI 07CM2 .16 W/CM2 .01(16N)0	(16M) SIGA DEG)	11.6 10.1 9.5 10.1 11.7	SIGA DEG)	# - 0 0 0 4 4	
TIME CC CC CC CC CC CC CC CC CC CC CC CC CC	01	30 175 175 175 170 130		10.8 10.6 10.6 10.5 10.5	8U*100 .015 .025
77 THER DEG OFG (MI 3 10 10 13 10 10 10 10 10 10 10 10 10 10 10 10 10	8		TE E	2.78 2.73 2.65 2.65	.0006 .0003 .0003
17/03/77 WEATH WEATH TEMP DE POINT DE BILITY ( 6 MID 01 B= . 01 (8M	1127 WS	1.25	Sign	1.23 1.38 1.54 1.72 1.92 2.15	1-1-11
DEW VISI	WD DEG)	302. 294. 286. 288. 288.	WS (M/S		.0569 .0318 .0177
		1			
07:00:00 0.6 8.3 2 TOTL 10 14 7620 16 93.72 16 93.72	3.0106 SIGE (DEG)	90.84	SIGE (DEG)	4 3 3 5 5 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 8888
07:00 -0.6 -8.3 0 2 TO 1 1 H (16M) ERVED	16M	45.66	4-7		80 46
ME 30 30 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	99	96 09 112 40 77 77	SIGA (DEG)	49.6 43.6 40.8 38.2 35.7	1.653 4.579 10.841 27.767
	O I W O		4 G	00 06 16 69 12 21	-0
MEAT MEAT DO 3/7 DO MI D	SHIS	20 48 73 88 20 20	1 2 3	1.00 1.06 1.16 1.36 1.69 2.12	0605 .0541 .0414
	.038		WS M/S)	.12 .45 .64 .87	02 17 51 39
DEM VIS	(AN)	66. 62. 68. 83.	5	77777	20/U0 20/U0 0351 0199
22.22	19:	6.48			
06:00:00 0.6 8.9 2 TOTL 10 HI 7620 .14 2 16M) 2.42 16M) 2.42	).0319 SIGE (DEG)		SIGE (DEG)	4.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5	2 0000
ME 06:00 0.6 -8.9 20 2 TOTI 50 HI 76 1/CM2 1/CM2 181 (16M)	SIGA DEG)	17.7.1	46	0 0 0 0 0 0 0 0	100 100 07 119 59
1 10 E-W	534 P S	1	SIGA (DEG)	21.0 18.5 16.2 14.3 12.5 11.0	.687 1.907 3.919
8 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1).05 TEMP	3.6502	(C.)	.02 .02 .02 .02 .05	
1 m m a + + 0   1	inn	3.28 3.28 4.03 4.03	DATA	1.92 2.04 2.28 2.72 3.40 4.02	.0031
17/1 17/1 181L 1924	.1021	NWW444		2.64 2.90 3.19 3.86 4.25	
DATE DEN VISI		195. 188. 185. 193.	MS (M/S)	90 W W W 44	20/02 .0559 .03307 .0310
<u> </u>					
oi In Ez	3		SQUARES (M)		
OBSERVED  O (TENTHS  D HT (M)  PONENTS  T RADIATIO	USTAR	48 326 84 84 84 84 84 84 84 84 84 84 84 84 84		2 2 2 2 2 2 3 3 2 2 3 4 4 8 2 0 0 9 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	4.0 16.0 39.2
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION CHARDSON NO	US		LEAST		

CBSERVED CA	CATA													
	"	CATE	17/03/77	TIME 09:0	: 00:00:60	DATE 17	17/03/11	TIME 10:	10:00:00		DATE 17	17/03/11	TIME 11:	10:00:11
	••		ER				a u	SW				WEATHER	SW-	•
	••		TEMP DEG	J	•	-	TEMP DEG	U			1	TEMP DEG	_	
	••	DEM PC	POINT DEG	C -3.9	•	DEM PU		J			DEW POINT			
	?	VISIB	VISIBILITY (MI)	50		> 3	Y	.75				LITY (MI)	1.	
CLU HENINS	•		01 W 01		יחור זה:	10		- :	1016	:	01			INIT TO
CED HI LAD	• •		0				16					7 7		
EXPUNENTS		41 EA	179	1		A=26	8= 28	"		4	=22	8=11	P= .13	
OTCHADOCCE NO				MW/CM2			4.33	2/1					MW/CMZ	
KILLAKUSUN NU		191	( NO. )	CHOIL		1 001	٠.	-			111		( WOLL )	
0141111	•	139-1928		LUBSERVEL	DAIA	761.66	-	LUBSERVED	A LAD		M761-66		LUBSEKVED	U DATA
USTAR	• ••	1	( 8 H	(H91)		£ .	(8 W)	(W91)	33		£ 4	( 8 kg	W 91	22
		Q.	WS TE	TEMP SIGA	SIGE :	9	WS TEMP	MP SIGA	SIGE		Q.X	WS TE	EMP SIGA	SIGE
HEIGHT (M)	••	_	_	(DEG)	_	9	_	-	( DE	:	-	-	-	
1														
2.	**	345.	4.36	7.5		4.	4.58	9	0		351.	3.96	12.	_
*	••	336.	5.02	9.9		356.	-		6			4.42	5.8	
.8	••	330.	5.38	1.9	1 5.3:		5.79	4.				18.4	5.4	4 3.9
.91	••	333.	61.9	5.3	1 4.8:		6.52	3.9	9 3.5:			5.34	5.	
32.	••	339.	6.95	5.3			7.08	2.	2			5.74	*	8 3.5
48.	••	336.	7.50	4.5			7.60	2.	2			90.9	5.	
LEAST SQUARES	ES	FITTED DATA	DATA											
		SM	TEMP	SIGA	\$16E:	M.S	TEMP	SIGA	SIGE		S#	TEMP	SIGA	SIGE
PEIGHT (M)	••	(M/S)	(3)	(DEC)	(DEG) :	(H)	3	(DEG)	(DEG)	••	(M/S)	3	-	(DEG)
1.0	**	3.89			8.3 :	4.14		7.4	7.3		3.65		10.2	4.9
2.0	••	4.37		7.3	7.2 :	4.62		6.2	0.9	••	4.00		8.7	4.5
0.4	••	16.4		9.9	6.2 :	5.15		5.1	4.9		4.39		7.5	4.2
8.0	••	5.52	•	0.9	5.4 :	5.75		4.3	4.1		4.81		4.9	3.9
16.0	••	61.9		5.5	. 1.4	6.42		3.6	3.4	••	5.27		5.5	3.6
32.0	••	96.9		9.0	. 1.4	7.16		3.0	2.8		5.17		4.7	3.3
48.0	••	7.45		4.7	3.7 :	7.63		2.7	5.5		60.9		4.3	
		20/00	DTH/02	BU*100	R I :	20/00	DTH/02	BU*100	R.I.		20/00	DTH/DZ	BU*100	R.I
4.0	**	1905				.1884					.1343			
8.0	••	.1070			••	1501.				••	.0736			
16.0	••	1090			••	.0586					.0403			
39.2*	••	.0344			•	.0325				••	.0200			
	-													

CLD (TENTHS) CLD HT (M) EXPCNENTS NET RADIATION RICHARDSON NO		DEW VISI OW VISI OW A= (4M)	32 × 0 × 0 × 0 × 0 × 0 × 0	C C C C C C C C C C C C C C C C C C C	10:00:00 :: 00.4 :: 7.7 :: 10TL 2: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.10 :: 1.1	DATE 187  DEW POIT  VISIBIL  LOW 4 M M M M M M M M M M M M M M M M M M	03/77 MEATHER MP DEG NT DEG ITY (MID 0 MID 0 MID 43.89 4 (8M) 7 (8M)	TIME C C C D D D H D MW/CM69(	7 -1-	DEW PG VISIBIL LOW 6 1 LOW 6 1 LOW 155 A=07 (4M)	03/77 WEATHER WEATHER INT DEG INT DEG ITY (MI MID 25 MID 54.59 16 (8M)	C 2.8 C -7.8 ) 50 HI HI P= .12 MW/CM2 -45(16M)	12:00:00 2.8 7.8 TOTL 6 HI 12 12 16M189 16M189
USTAR FEIGHT (M)	-	1.5	(8M)	7.2098 (16) TEMP SIGA	M).2120:	(4M) .2 WD (DEG)	94 (8 WS M/S)	2446 MP S	M).2510: SIGE: (DEG):	(4M).3 WD (DEG)	26 ( WS	3337 MP S	51.3
1.2.4.8.1.16.16.16.16.16.16.16.16.16.16.16.16.1		328. 320. 313.		58 42 16.9 31 16.2 02 14.6			2.50 1 2.98 1 3.04 1	.96 .94 16.8 .93 15.4 .54 14.5		333. 324. 317.	3.57 2 4.20 2 4.32 2	2.92 2.71 11. 2.36 11. 2.16 10.	8508
48. : 48. : LEAST SQUARES	ES	316. 308. FITTED			8 80	299.	56	.56 11.	801	324.		77	9 6.8
PEIGHT (M)		MS (M/S)	TEMP (C)	SIGA (DEG)	S1GE : (DEG) :	MS (M/S)	TEMP (C)	SIGA (DEG)	SIGE : (DEG) :	WS (M/S)	TEMP (C)	SIGA (DEG)	SIGE :
1.0		1.96		19	4 rv n	2.35	2.01	6.	4 4 0 0 7 0	3.39	2.6	12.4	6.0
8.0 16.0 32.0 48.0		2.40 2.51 2.75 2.75 2.86	15.	13.9	8.7.7.8	3.07		13.9 12.5 11.2 10.6	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4.00 4.35 4.35 5.14 5.40	2.28 1.86 1.39	10.1	0 % C
		20/00	DTH/02	BU*100	RI :	20/00	DTH/02	80*100	RI :	20/00	DTH/DZ	BU*100	1 2
4.0 8.0 16.0 39.2*		.0509 .0273 .0146	0360 0303 0189	410 -1.206 -2.633	13 73 -4.23	.0833 .0455 .0249	0466 0400 0268	338 972 -2.184	-12:	.0606	0563 0465 0270	200 559 -1.102 2.020	08 :-1.41

CBSERVED CATA

4	
-	
CA	
_	
0	
u	
>	
α	
SE	
9	

		MEATHER	- ~	DO-00-61 3		1	WEATHER	or	20.00			* WEATHER	HER	200000	3
		TEMP DEG C	5 C	4.1			TEMP DEG C	EG C	4.6	•		TEMP C	DEG C	3.9	
	: DEN	DEM POINT DEG	EG C	-8.3	••	DEW	POINT D	EG C	8.6-	••	DEW	POINT E	DEG C	+.6-	
	: VIS	VISIBILITY (MI	CIM	20	••	VISI	BILITY	(MI) 5	0		VISI	BILITY	(MI)	0	
CLD (TENTHS)	:10	OIM 9	Ħ	TOTL	TL 6:	LOW	4 MID	IH 1	101	.5 7	MOT:	2 MID	8 HI	TOTL	16 3
CLD HT (M)		1525 MI	0	Ī	••	LOW	1525 MI	0 3050	Ħ	••	LOW	1525 MI	ID 3050 HI	H	
EXPONENTS	. A=	.01 8=02 P=	.02 P=	.12	•	A=	14 8=	-10 P=	60.	••	A= -	10 8=	.25 P=	.08	
NET RADIATION	••	47.		CM2	•		34.	47 MW/CM2	M2	•		35.	.17 MW/CM2	CMZ	
RICHARDSON NO.:		(4M)35 (8M)9	9 (H	-1 W91 18	-2.00 :	( M+)	37 (8	(8M)-1-10(16M)	(16M)-	2.44 :	( M )	30 (8	3M) - 84	-( W91 )6	1.94
		. 192M)	90) 66.	SERVED	DATA):		9241-5.	64 (085	ERVED	DATA):		92M1-4	20 (08	SERVED	DATAL
(1/1)*10	( 4H) :	95 (8	M)-1.3	1 (16M	1-1.32:		1.01 (8	M)-1-47	(H91)	-1.61:		83 (8	3M)-1-14	(M91) 6	-1.28
USTAR	H+) :	(4M).2597 (8M).2657 (16M).2688:	M1.265	W91) L	1.2688:		(4M).2875 (8M).2909 (16M).2923:	M) . 2909	(164)	.2923:		(4M).2940 (8M).2939 (16M).2919	3M1.293	1491) 6	.2919:
	Q¥ :	MS	TEMP	SIGA	SIGE :	Q.	E.S.	1	!	SIGE :	40	MS	TEMP	SIGA	SIGE
FEIGHT (M)	: ( DEC )	3	(3)	(DEC)	(DEG): (DEG)	(DEC)	(M/S)	(3)	( DEG )	(DEG): (DEG)	(050)	(M/S)	5	(DEG)	(DEG)
1.			3.53					4.24					4.80		
2.	: 322.		3.40		••	8	3.00	4.00	16.6	••	341.	3.11	4.62		
+	: 313.		3.18		••	358.	3.27	3.51	16.4	••		3.45	4.31		
8.	: 306.	3.14	2.86		8.9:	352.	3.46	3.36	14.9	10.1:		3.62	4.15		7.9
16.	: 308.		2.60	21.5	9.1:	352.	3.77	3.20	12.8	12.3:	327.	3.84	4.02	26.9	9.6
32.	: 314.	3.67	1.87		8.6:	359.	3.91	2.82	11.2	11.9:		4.00	3.73		10.9
48.	: 308.	4.05	1.96		8.7:	355.	4.02	5.54	11.2	12.5:		4.09	3.51		12.7

		_
	4	α
-8		
- 2		-
	•	3
	2	3
-3	C,	_
- 10	c	כ
	-	7
-7	u	u
- 4	_	_
	•	_
	۰	-
	•	
м		-
13	u	L
	-	•
- 5	u	^
	٠	u
	ш	いなりない
	=	
	е	L
	-	3
	3	-
	Ξ	0
N	7	'n
-8	·	•
- 19	u	n
	۰	-
	1	
	4	n
	á	ź

	••	SM	TEM	S	SIGE	••	MS			SIGE	••	MS	TEMP	SIGA	SIGE
HEIGHT (M)	••	(M/S)	(0)	(DEG)	(DEG)		(M/S)	(0)	(DEG)	(DEG)		(N/S)	(3)	(DEC)	(DEG)
1.0		2.50	3.48	21.1	9.5		2.86		19.2	8.5		3.01	4.62	34.8	4.7
2.0	••	2.71	3.39	21.2	9.3	••	3.04	3.91	17.4	9.1	••	3.19	4.57	32.4	5.6
4.0	••	2.95	3.24	21.3	9.5	••	3.24		15.7	8.6	••	3.38	4.47	30.1	6.7
8.0	••	3.20	2.95	21.4	0.6	••	3.46		14.2	10.5	••	3.58	4.30	28.1	7.9
16.0	••	3.48	2.47	21.4	8.9	••	3.68		12.9	11.3	••	3.79	4.00	26.1	6.6
32.0	••	3.78	1.93	21.5	8.8	••	3.93		11.7	12.2	••	4.01	3.63	24.3	11.3
48.0	••	3.96	1.94	51.6	8.7	••	4.08		11.0	12.7	••	4.15	3.55	23.3	15.5
		DU/DZ DTH/DZ	DTH/DZ	BU*100	RI		70/00	DTH/02	BU*100	PI		ZG / NO	DTH/D2	BU* 100	I a
4.0		- 6180.	0646	422	10		.0689	0497	267	09		.0645	0354	175	06
8.0	••	-0445	0538	-1.192	86	••	.0367	6140	795	33	••	.0342	0295	521	24
16.0	••	.0240	0323	-2.430	-4.43	••	9610.	0263	-1.761	-2.20	••	- 1810.	0179	-1.129	97
39.5*	••	.0237	.0156	5.796	00.	••	6900	0075	-2.610	-6.56	••	- 0056 -	75002-	-1.249	-1.68

	: DATE	DATE 21/03/77	77 TIME	E 09:00:00	: 00:	DATE	DATE 21/03/77	LIME	TIME 10:00:00	: 00:	DATE	DATE 21/03/77		TIME 11:00:00	00:
		WEATHER	HER		••		WEATHER	ER		••		WEATHER	HER		
		TEMP [	DEG C	2.8	••		TEMP DE		3.9	••		TEMP D	DEG C	7.8	
	. DEW	DEM POINT DEG	) EG C	1-9-	••	DEW	SO INIGO		1.9-	••	DEW	DINIO	) EG C	-7.2	
	: VISI	VISIBILITY (MI	(IW)	7.0	••	VIST	31LITY (	-	0	••	VISIE	3 IL ITY	(MI)	10	
LD (TENTHS)	*FO4	GIM	Ħ	TOT		LOW	MID	HI	TOTL		LOW	MID	H	TOTL	0 7.
CLD HT (M)	MC7 :	M	MID	H		LOW	: LOW MID		H		LOW	IN	0	Ŧ	
EXPONENTS	: A=	A=06 B=	-0 90°	.08	••	A= -	A=18 B= .18 P=	18 P=	+0.	••	A=22	8=	-10 P=	: A=22 B= .10 P=05	
NET RACIATION		18.	18.84 MW/	. 1	••		29.5	J/MW 1	M2	••		36.	28 MW/	CM2	
RICHARDSCN NO.:		(4M)-6.76 (8M) =19	3M) =19.	5(16M)-37.1	37.1 :	(4M) -	10.3 (BM	1) -33.6	(16M)	.83.3	-(M4)	7.92 (8	IM) -29.5	(16M)	93.7
		92M1 5.	5.36 (DBS	SERVED DATA	DATA):	(39.19	92M1-6.2	8 (085	ERVED	DATA):	(39.19	32M1-6.	64 (08	SERVED	DATA
(1/1)*10	: (4M)-17.7		(8M) -25.5		-24.3 :	- (M4)	27.0 (8M	1) -22.(	(16M)	-54.5	(4M)-2	8) 8.0	IM) -39.	1 (16M)	-61.3
USTAR	: (4M):	7	(8M).1194		(16M).0969:	(4M)	(4M) .1942 (8M) .2208 (16M) .2339:	. 220	8 (16M)	.2339:	(4H).	1428 (8	31. (M)	(4M).1428 (8M) .1587 (16M).1743	.1743
	QM :	MS	TEMP		SIGE:	Q.M		TEMP	SIGA	SIGE :	0,1	M.S.		SIGA	SIGE
HEIGHT (M)	(DEC)	(M/S)	(3)	(DEG)	(DEG): (DEG)	(DEG)	(M/S)	(C) (DEG)	DEGI	(DEG):(DEG)	(DEG)	(M/S)		(C) (DEG)	(DEG)
1.			2.15					5.42					6.37		
2.	: 144.	19.			••	77.	1.10	5.22	43.1	: 5.	5.	.88	6.32	48.4	
4.	: 141 :	.75			••	.99	1.21	5.25	45.0	••	350.	16.	6.16		
8.	: 133.	.79			26.2:	62.	1.12	4.77	40.5	20.9:	337.	16.	6.02		
16.	: 147.	.84	-		30.1:	.59	1.23	4.59	34.5	27.1:	349.	.92	5.85		35.8:
32.	: 156.	.83	1.30	19.9	32.4:	51.	1.21	4.30	29.5	28.7:		.87	5.58		
48.	. 158.	16.	1.20	23.5	28.3:	54.	1.33	3.98	23.9	28.9:	356.	.75	5.25	29.5	36.5

MASERVED DATA

LEAST SQUARES FITTED DATA	RES	FITTED	DATA								- 19					
		SI	TEM		SIGE		SH	TEMP		SIGE		N.S.			SIGE	! "
HEIGHT (M)	••	(8/8)	(3)	(DEG)	(050)	••	(M/S)	(3)	(DEG)	(DEG)	••	(M/S)	0	(DEG)	(DEG)	••
1.0		.65			24.2		1.08	5.32	53.3	15.3		36.			25.3	! "
2.0	••	69.			25.3	••	1111	5.26	47.1	17.3	••	6.			27.1	••
4.0	••	.73		24.9	26.4	••	1.15	5.16	41.6	19.6	••	.92	2 6.21	44.4	29.1	••
8.0		.78			27.5		1.18	4.96	36.7	22.1	••	.89			31.2	••
16.0		.82			28.7		1.22	4.63	32.4	24.9	••	. 86			33.5	••
32.0	••	.87			59.9		1.26	4.18	28.6	28.5	••	.84			36.0	••
48.0	••	06.	1.24		30.7	••	1.28	4.03	26.6	30.3	••	.8.			37.5	••
		20/00	: DU/DZ DTH/DZ	80*100	۳.		20/00	DTH/D2	BU*100	I.		Z0 / N0	DTH/DZ	BU*100	ı.	! "
4.0		.0140	.01400371 -3.	-3.949	95				-1.722	•		0097		•	12	! "
8.0	••	+100.	.00140300	105-11-	-6.31	••	- 0900	0343	-5.545	-1.51	••	1.0047	0188	-5.305	-1.39	••
16.0		.0039	0158	-21.474 -	14.49-				-13.810	•	••	0023			-40.36	••
39.2*	••	.0050	-0037	27.429	00.	••			-33.975#	-		0075		100	*****	••

CBSERVED DATA	TA															
		DATE	DATE 21/03/77	TIM	E 12:00:00	: 00:	DATE	DATE 21/03/77		TIME 13:00:00		DATE	: DATE 21/03/77		TIME 14:00:00	: 00:
	••		WEATHER	HER		•		WEATHER	HER				WEAT	THER		••
	••		TEMP DEG C	5 C	8.9	••		TEMP DEG	5 C	4.6	•		TEMP DEG C	DEG C	10.0	
	••	DE M	DEM POINT DEG	EG C	8.1-	••	DEM	POINT D	EG C	-7.8		DEW	DEW POINT DEG C	DEG C	-7.8	•
	••	VISI	VISIBILITY (MI	(IW)	02		VISI	VISIBILITY (MI	(IM)	0.	••	VISI	VISIBILITY (MI)	(HI)	02	••
CLD (TENTHS)	:	FLOM.	MID	H	TOTL	0	LOW	GIW	IH	TOTL	:0 7.	LOW LOW	OIN	H	TOTL	:0 7
CLD HT (M)		107	MID	0	ΙH	••	LOW	GIM	0	Ŧ	••	HOT :	OIN	0	H	•
EXPONENTS	••	A=	A=07 B=	-18 P=	+0.	••	A=	A=13 B=	-06 P=	•05	••	A=	A=14 B=	-21 P=	90.	
NET RADIATION			39.	39.91 MW/C	CM2	••		39.49	49 MW/C	M2			34.	34.47 MW/CM2	CMZ	••
RICHARDSON NO.:		-( W+)	6.22 (8	M) -20.1	(16M)-	49.3 :	( 4M)-	(4M)-4.81 (8M)-15.0 (16M)	M)-15.0	(H9T)	-32.6 :	-(W)	1.64 (1	3M)-4.6	5(16M)-	7.17 :
		(39.1	(39.192M)-8.29 (OBSERVED DATA	29 (08	SERVED	DATA):	(39.192M	92M1 .	.44 (085		DATA):	(39.1	92M) 4.	(39.192M) 4.99 (OBSERVED DATA	SERVED	DATA):
(1/1) #10	••	( +W)_	16.3 (8	M) -26.4	(M91)	(16M)-32.2:	(4M)-12.6	12.6 (8	4) -19.6	-19.6 (16M)-21.3	-21.3 :	(4M)-	14M)-4.35 (8	8M1-6-13	3 (16M)-4.7	-4.71:
USTAR	••	( 4M)	(4M).1850 (8M)	(8M) .2037		(164).2092 :	(4M)	~	(8M) .2669	.2669 (16M).2652	. 2652 :	(4M)	2279 (1	(4M).2279 (8M).2340	(H91) (	(16M).2180:
		Q.	N.S.	TEMP	SIGA	SIGE :	Q.	N.S.	TEMP		SIGE:	Q.	MS	TEMP		SIGE :
HEIGHT (M)		1990):	(M/S)	3		(DEG): (DEG)	(DEC)	(M/S)	(C) (DEG)		(DEG):(DEG)	(DEG)	(M/S)	(C) (DEG)		(DEC):
1.				7.92					9.50					10.30		
2.		272.	1.24	7.92		••	116.	1.69	9.35	40.4	••	257.	2.01	10.14		••
4.		260.	1.33	7.85		••	108.	1.86	00.6	4.44	••	250.	2.11	9.77		••
8.	••	246.	1.28	7.44		20.03	104.	1.94	8.59	37.0	18.6:		2.25	64.6		16.3:
16.	••	224.	1.34	7.44	54.2	30.4:	100	2.10	8.50	30.6	18.9:	243.	2.35	9.43	6.44	19.2:
32.	••	211.	1.36	7.21	53.3	27.5:	112.	2.07	8.12	31.7	18.6:		2.34	9.23		22.4:
48.	••	197.	1.45	6.93	63.5	29.5:	113.	16.1	7.98	35.6	21.3:		2.51	9.33		23.7:

	TEMP		SIGE	••	MS			SIGE	••	NS	TEMP		SIGE
3		(050)	(DEG)	••	(M/S	(3)	(DEG)	(DEG)	••	(M/S)	(3)	(DEC)	(050)
.89		71.7	15.3		1.7			16.2		1.94		56.3	10.5
7.86		68.5	17.3	••	1.78	9.26	45.8	16.9	••	2.03	10.05	51.3	12.2
.79		65.4	9.61	••	1.8			17.5	••	2.12		46.7	14.2
99.		65.5	22.3	••	1.9	-		18.2	••	2.21		45.5	16.4
.43		28.7	25.2	••	1.90			19.0	••	2.31		38.7	19.1
		57.0	28.6	••	2.03			19.8	••	2.42		35.2	22.1
16.		52.5	30.8	••	2.06			20.2	••	2.48		33.3	24.1
9U/02 DTH/02 B	1 00	BU * 100	٦.		Z0/N0	DTH/D2	BU*100	2	-	20/00	DTH/DZ	BU*100	R.
.01130228		.775	07		.0200	0554	914	-10		.0312	0462	570	09
- 46		505.	34	••	.0103	0457	-2.825	43	••	.0163	0358	-1.620	63
.27 -	-	-6.207	-5.49	••	.0053	0263	-6.095	-5.24	••	. 0085	0150	-2.491	-2.26
175 -20	~	1.539-	311.34	••	0100	.0012	1.676	00.	••	9010	.0163	14.831	00.

```
: DATE 21/03/77 TIME 15:00:00 :
                         WEATHER
                       TEMP DEG C
                                    11.1
               : DEW POINT DEG C -6.7
               : VISIBILITY (MI) 60
CLD (TENTHS) :LOW MID HI TOTL
CLD HT (M) : LOW MID HI
EXPONENTS : A= -.02 B= .16 P= .116**
NET RADIATION : 26.65 MW/CM2
RICHARDSON NO.: (4M)-1.83* (8M)-.60* (16M)-62.1 :
               : (39.192M) -.87 (OBSERVED DATA):
             : (4M)-4.85* (8M)-.809* (16M)-40.6:
   (1/L)*10
             : (4M).1645* (8M).1228* (16M).2622:
   USTAR
               : WD
                        WS TEMP SIGA SIGE :
  FEIGHT (M) : (DEG) (M/S) (C) (DEG) (DEG):
                              11.00
       1.
            :
            : 5. 1.35 10.89 59.6
       2.
              : 358. 1.50 10.50 58.3
              : 346. 1.56 10.44 59.2 22.1:
       8.
            : 348. 1.72 10.31 54.3 21.0:
      16.
             : 346.
      32.
                       1.62 9.91 53.4 22.4:
                       1.46 9.71 57.6 30.8:
             : 317.
  LEAST SQUARES FITTED DATA
  : WS TEMP SIGA SIGE: HEIGHT (M) : (M/S) (C) (DEG) (DEG):
      1.0 :
                   1.41 10.85 60.4 14.7 :
             : 1.44 10.81 59.4
: 1.48 10.71 58.4
      2.0
                                         16.4 :
                                          18.3
      4.0
                  1.51 10.54 57.4
1.55 10.25 56.5
      8.0
               :
                                          20.4 :
             :
     16.0
                                          22.8
           :
                   1.59 9.86 55.5 25.4 :
     32.0
     48.0 : 1.61 9.73 55.0 27.1 :
       : DU/DZ DTH/DZ BU*100 RI
     4.0 : .0120 -.0338 -.854 -.07 : 8.0 : .0062 -.0286 -2.761 -.43 : 16.0 : .0032 -.0184 -6.765 -6.52 : 39.2* : -.0100 -.0025 -5.549 -64.66 :
        * OBSERVED DATA ** OBSERVED DATA FOR 2-16M
```

CBSERVED CATA	-														
	DATE	DATE 21/03/77 TIME	TT TIME	E 16:00:00		DATE 2	: DATE 21/03/77 TIME 17:00:00	7 TIME	17:00		DATE	: DATE 21/03/77 TIME 18:00:00	HIT TI	E 18:00	: 00:
		MEATHER	THER		••		WEATHER	HER		••		WEATHER	THER		
		TEMP DEG	DEG C	11.1	••		TEMP DI		10.1	••		TEMP C	DEG C	11.0	••
	: DEN	DEW POINT DEG	DEG C	1-9-	••	DEW F	DINT DE		-7.2	••	DEN	DEM POINT DEG (	DEG C	-7.7	••
	: VIS	VISIBILITY (MI	6 (IM)	00	••	VISIE	VI SIBILITY (MI)	9		••	VIS	IBILITY	CHI	85	••
	*COM	MID	Ξ	TOTL	1:0 1	MO	MID	Ħ	TOTL	.0 7	LOW	MID	H	TOT	١ 0:
-	FOM :	E	MID	Ŧ	••	LOW	MID	0	Ŧ	••	LOW	I	10	Ŧ	••
EXPONENTS	: A=	-04 8= .09 P=	-d 60°	60.	••	A=10 B=	-8 O	.30 P=	60.	••	A= -	- 29 8= -	=d 01.	•15	••
NET RADIATION		16.	.32 MW/C	:M2	••		3.	3.98 MW/CM2	MZ	••		-9-	.91 MW/CM2	CM2	
RICHARDSCN NO.:		(4M)43 (8M)-1.33(16M)-3.43	3M)-1.33	3(16M)-	3.43 :	( 4M)	(4M)38 (8M)-1.12(16M)-2.42	M)-1.12	-(M91)	2.42 :	( 4 M )	3) 10.	3H1	6M)	03 :
		(39.192M)-1.62 (OBSERVED DATA):	.62 (085	SERVED	DATA):	(39.19	(39.192M)-7.89 (OBSERVED DATA):	89 (085	ERVED	DATA):	(39.	DATA): (39.192M)**** (085ER	*** (08:	(OBSERVED DATA)	DATA):
(1/1)*10	. (4M)	(4M)-1-16 (8M)-1-17	17-1-1ME			(4M)-	1.03 (8)	94-1-(M	(W91)	-1.60:	(4H)	.02 (8	O. (ME	(16H)	02:
USTAR	. (4M)	(4M).1712 (8M).1745	8M1-1745		(16M).1792:	(4M)	341 (8)	M).2367	(16M)	.2371:	(4H)	(4M).2341 (8M).2367 (16M).2371: (4M).2204 (8M).2118 (16M).2157:	3M) . 211	(H91) 8	.2157:
	9	S.M.	TEMP	SIGA	SIGE : WD	2	SM	TEMP SIGA	SIGA	SIGE : WD	Q.	SH	TEMP SIGA	1	SIGE :
HEIGHT (M)	: ( DEG )	(M/S)	(0)	(930)	(DEG): (DEG)	DEG.)	(M/S)	(C) (DEG)		(DEG): (DEG)	(DEG)	(M/S)	(3)		(DEG):
1.			11.70					11.91					10.85		
2.	: 107.	1.17			••	.66	2.40	11.54	21.6	••	151.	2.55	10.82	8.0	
*	102.		11.25	45.9	••	.06	5.69	11.17	20.7	••	141.	2.96	10.55	7.3	••
.00	: 105.	. 2.03			18.9:	88.	2.85	11.13	18.8	6.53		3.37	10.68	6.5	3.9:
16.	: 107.				19.4:	92.	3.05	11.06	1.91	8.5:		3.80	10.63	4.8	3.2:
32.	1111.				21.7:	.16	3.17	10.72	15.7	10.5:		4.03	10.49	3.4	2.8:
. 84	107.	. 2.44	10.43		22.0:	.86	3.24	10.49	16.5	10.9:		4.11	10.17	3.6	3.4:
														-	

						-					-				-	i
	••	SM	TEMF		SIGE		MS	TEM		SIGE	••	MS			SIGE	
FEIGHT (M)	••	(M/S)	(3)	(DEG)	(DEC)		(M/S)	(3)	(DEG)	(DEG)	••	(M/S)	3	(DEG)	(DEG)	
0.1	"	1.69	•		15.4		2.32	11.59	23.1	3.6		2.38		10.6	4.5	•
2.0	••	1.79	11.38	40.8	16.4		2.47	11.54	21.5	4.4	••	2.65	10.75	8.6	4.2	
4.0	••	1.90			17.5	••	2.64	11.45	20.0	5.4	••	2.94		7.1	3.9	
8.0	••	2.02			18.7	••	2.81	11.28	18.6	1.9	••	3.27		5.8	3.6	
16.0	••	2.15			6.61	••	2.99	10.99	17.4	8.2	••	3.63	_	4.7	3.4	
32.0	••	2.29			21.3	••	3.19	10.62	16.2	1001	••	40.4		3.9	3.1	
48.0	••	2.37			22.1	••	3.30	10.53	15.5	11.4	••	4.29		3.4	3.0	
	"	20/00	0TH/02	80*100	RI		20/00	DTH/02	80+100	R.I.		20/00	DTH/D2	BU*100	F.	1
4.0	"	.0386	0184	280	09		.0555	0337	267	07		.1035	.0025	910.	00.	•
8.0	••	-0205	0162	873	43		- 0295 -	0283	162	32	••	.0575	.0013	.027	00.	
16.0	••	6010	8110	-2.252	-2.96	••	- 7210.	+110°-	-1.718	-2.11	••	.0319	60000-	062	03	
39.5*	••	.0175	++10	-14.591-3	59.05		- 5500-	++00*	-2.264	-3.95	••	.0050	0100	-3.211	-4.34	
					1											

	: VISIBII :LOW : : LOW : A=06	11 T	· · · ·	-7.8 5 TOTL HI	٠		DEW POINT VISIBILITY OW MID LOW M	POINT DEG BILITY (MI MID MID MID	00 = # #	5.6 -7.8 20 TOTL HI			DEW POINT VISIBILIT VISIBILIT COW MID	TEMP DEG POINT DEG BILITY (MI MID MID	, S IH S	-9.4 10 TOTL HE	
222	6140	10.19 (8M) .49 (8M) (8M)	. 68 (085 9.59	Z-W	.99 : DATA) : 9.79:		= = = =	9-1		6M) VED 16M)	1.61 DATA) 25.19		540	-8.72 (8M) .38 (8M)	.77( .085 2.06 0545		1.45 DATA) 20.73
	: WD	WS T	TEMP (C)	SIGA DEG)	SIGE (DEG)		MD DEG) (	MS T	C)	SIGA DEG )	SIGE (DEG)		WD DEG) (1	WS T	ENP S	SIGA S	SIGE (DEG)
			6.05						3.29						2.84		
		6	96.9	5.4			183.	1.36	4.28	2.8						13.4	
	147.		8.03	2.1			176.	1.94	14.5	2.0	-				3.82	2.21	2.4
			9.80	2.3				2.55	7.00	0.4	1.3					10.2	2.7
		3.92	9.83	1.9				3.99	9.14	2.6	0.0			3.40		10.6	3.9:
SQUARES	FITTED DATA	DATA															
	WS (W/S)	TEMP (C)	s O	16A EG)	SIGE (DEG)		WS (W/S)	TEMP (C)		SIGA DEG) (	SIGE DEG)		WS (W/S)	TEMP (C)	P S1GA		SIGE DEG)
1	1.41	10	2	.2	-		1.08	1		-			1.59	3.26	14.	-	1.2
	1.75		2			••	1.38			4.5	8.	••	1.88		13.	~	1.5
	2.16		2	0.	.2	••	1.75			3.9	6.	••	2.22		12.	•	6.1
			-	6.	•2	••	2.24			3.5	6.	••	2.63		::	•	2.3
	3.32		7	6.	4.	••	2.85			0	6.	••	3.12	5	10	_	6.2
	4.11	10.58		æ «	5.		3.63	9.22	~ ~	- 4	6.0		3.69	5.69	•	0.0	3.6
	20/00	10	BU	001	12		ZQ/NQ	5	BU	00	7		ZQ/NQ	I F	80*100	1	=
1	.1553	-2212	1 9	38	00.		.1431	.2558	4.690	0	00.		.1256	.1405	1.610		00
	1960.		ø	20	00.	••	.0912	.2223	10.00	76	00.	••	.0743	.1203	3.92		00
	.0595	1010	8.1	45	00.	••	.0581	.1552	•	12	00.	••	0440	.0799	7.422		00.
	.0200		8	12	00.	••	6110.	.0300	9.62	56	00.	••	9090	00400	14.67		00.

CBSERVED CATA	ATA															
		DAYE	DAYE 21/03/77 TIM	MIT 7	E 22:00:00	: 00:	DATE	DATE 21/03/77 TIME 23:00:00	TIME	23:00	: 00:	DATE	22/03/7	DATE 22/03/77 TIME 00:00:00	00:00	: 00:
	••		WEATHER	THER				WEATHER	HER				WEATHER	THER		•
	••		TEMP DEG C	DEG C	9.0	••		TEMP DEG	3 9 S	9.0	••		TEMP D	DEG C	9.0	
	••	DEW	DEW POINT D	DEG C	-8.9		DEW	POINT DE	0	-8.9	••	DEW	DEW POINT DEG	DEG C	-8.3	
	••	VIS	VISIBILITY (MI	-	20		VISI	VISIBILITY (MI	2	0	••	VISI	VISIBILITY (MI)	CINI	50	••
CLD (TENTHS)		FLOW	OIM	Ŧ	TOTL	:0	LOW	MID	IH.	TOT	1:0	LOW	MID	Ħ	101	1 0:
CLO HT (M)	••	FOM	M	MID	H	••	LOW	LOW MID	-	Ŧ	••	LOW	MID	01	Ħ	••
EXPCNENTS	••	A= -	48 8=35 P=	35 P=	04.	••	A=	55 8= -	-4 61.	.50	••		.15 8=15 P=	15 P=	.34	
NET RADIATION			-1.	-7.95 MW/	CM2	••		-7.61	SI MW/CM2	42	••		-7.	7.61 MW/CM2	.M2	••
RICHARDSCN NO.:	::	( M+)	.14 (8M)		1(16M)	: 69.	( W+)	.16 (8M)		.28(16M)	.43 :	(H+)			.45(16M)	. 92 :
	••		(39.192M)	609	SERVED DATA):	DATA):	(39.192M)		_	(OBSERVED DATA)	DATAL	(39.192M)		.27 (08	-	DATA):
(1/1)*10	••	( M+)		(8M) 2.1	9	4.95:	( M+)	1.34 (8)		(16M)	1.98:	( M +)			116M	8.50:
USTAR	••	( H+)	(4M).0926 (8M)	.08	2	(16M).0665:	(4M).1180	.1180 (8M)		(16M)		(44)		8M) .0948	1164	.0729:
		9	N.S.	TEMP	!	SIGE :	ş	NS	TEMP	1	S16E :	9	MS	TEMP	1	\$16E :
HEIGHT (M)		: ( DEC )	(M/S)		(DEG)	(056):(056)	( DEC )	(M/S)	(3)	(DEG)	(DEG): (DEG)	(DEG)	(N/S)	(3)	(DEG)	(050):
1.				34					56					96		
2.	••	197.	1.46	.19	18.9	•	147.	1.58	25	5.8	••	.46	1.99	67	8.9	
+	••	180.		.75	16.3	••	140.	2.37	.35	4.3	••	86.	19.2	47	6.3	••
8.	••	168.	2.13		13.6	3.3:	139.	3.43	1.71	5.4	.8.	88.	3.56	99.	5.6	2.2:
.91	••	152.		1.71		4.3:	141.	5.09	3.63	1.8	.8.	.86	3.98	2.12	4.9	3.2:
32.	••	136.		2.68		2.8:	152.	9.00	7.71	1:1	.5:	126.	4.68	4.38	6.2	2.2:
48.	••	138.		4.76		1.7:	152.	62.9	8.57	1.2	.7:	137.	6.48	5.76	3.2	1.8:
	-	-										-				-

HEIGHT (M) :														֡
EIGHT (M) :	MS	TEMP		SIGE	••	MS	TEMP	SIGA	SIGE	••	NS	TEMP	SIGA	SIGE
	(N/S)	(3)	(090)	(DEG)		(W/S)	3	(050)	(DEG)		(M/S)	3	(050)	(050)
1.0	1.02	3	31.7	8.4		1.18	68	8.4	1.2		1.62	16	8.0	3.7
2.0 :	1.35	.28	22.8	9.9	••	1.67	32	5.7	1:1	••	2.05	+1	7.2	3.3
. 0.4	1.78		16.4	5.2	••	2.37	.39	3.9	6.	••	2.59	29	6.5	3.0
8.0 :	2.35		11.8	4.0	••	3.36	1.72	2.7	.8		3.27	.57	6.5	2.7
16.0	3.11		8.5	3.2		4.77	40.4	1.8		••	4.13	2.10	5.3	5.4
32.0 :	4.11		6.1	2.5	••	6.76	7.30	1.3	9.	••	5.22	4.42	4.8	2.1
. 0.84	4.84		2.0	2.1		8.29	8.71	1.0	9.	••	5.98	5.15	4.5	5.0
•	20/00	OTH/02	BU*100	R.I		20/00	DTH/D2	80*100	R.I.		Z0/N0	DTH/02	BU+100	R.
. 0.4	11677	.1063	1.923	00.		, 2815	.3504	3.576	00.		.2035	.2281	1.958	00.
. 0.8	1108	1501.	4.369	00.		9661.	.3143	6.351	00.	••	.1286	.2089	4.479	00.
16.0	.0732	1044	9.855	00.		.1415	.2422	9.655	00.	••	.0812	+011.	9.104	00.
39.2* :	.1325	.1400	32.328	00.		.0756	.0638	6.137	00.	••	.1125	.0962	17.286	00.

E 03:00  -2.8  -10.0  20  TOT TOT  HI  SERVED  SIGA  1.2  1.2  1.2  1.8  5.6  6.2  6.2	2.6 1.6 1.9 1.0	8U*100 RI			000	8
		001+	7			
m 15 588841 51 1801894		! * !	10	31	27	
TIME GG C -1 CG C -1 CG C -1 CG C C -1 CG CG C -1 CG		1 1	1.997	4.1	9.827	
S	2.74	DTH/DZ	2178	6161.	.1580	
W 1	3.84 4.75 5.37	20/00	1		.0685	!
A 25 35 4 56 55 4 56 55 4 56 55 4 56 55 4 56 55 4 56 55 4 56 55 5 5 5		a	-	-	•	:
0:00 53 53 510 53 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510 510	6.99	RI :	. 00	. 00.	00.	
20 -1 -3 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2	1.5	8U*100	592	551	9.336	
DEGER   88 3 4 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	30 4 60 93	DTH/DZ BU				
ATE 22/03/77  WEATH TEMP DE VISIBILITY ( WM MID ON	24 3 3 9 5 5 5			•	•	.
	4400	20/00	.2400	.1638	11118	
1 0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .   0 .	1.1	۳.	: 00.	. 00.	8	3
10 10 10 10 10 10 10 10 10 10 10 10 10 1	1.2	BU*100	2.475	4.194	7.994	2553
177   PEG TT DEG	1.80	0TH/0Z	!		1 6901	1
S S S S S S S S S S S S S S S S S S S	5.93 5.93 7.10	0 70/00	!		.1136	12
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						ERVE
CLD (TENTHS) :: CLD HT (M) :: EXPONENTS :: NET RADIATION :: (1/L)*10 :: USTAR :: LEAST SQUARES LEAST SQUARES LEAST SQUARES LEAST SQUARES LO :: L	16.0 32.0 48.0		4.0	8.0	16.0	. 1

BSERVED CATA	
BSERVED CA	4
BSERVED C	-
BSERVED	4
BSERVE	u
BSERV	0
BSER	w
BSE	>
85	æ
85	w
8	S
	Œ
$\circ$	0

TEMP DEG C
-10.5
2 :
.38
/CM2
16M)
RVED DA
(4M) .79 (8M) 1.46 (16M) 2.31: (4M) 1638 (8M) .1508 (16M) .1376:
IGA SIGE : WD
(DEG) (DEG):(DEG
10.2
8.5
9.9
4.5
6.2
3.2

LEAST SQUARES FITTED DATA

		••	••	••	••	••	••			••	••	••
S16E (DEG)	14.3	8.0	4.4	2.5	1.4		••	R.	00.	00.	00.	00.
SIGA (DEG)	13.2	8.7	5.8	3.8	2.5	1.7	1.3	8U*100	1.487	3.177	6.025	8.682
TEMP (C)	-3.08	-2.86	-2.44	-1.64	20	1.96	3.19	DTH/02	.2148	5961.	.1599	6180.
WS (M/S)	1.69	2.21	2.89	3.78	46.4	6.45	7.55	20/00	.2611	9011.	+1111	0369
		••	••	••	••	••				••	••	
S16E	9.3	6.3	4.3	5.9	2.0	1.3	1:1	R.	00.	00.	00.	00.
\$16A (DEG)	12.5	6.6	7.3	9.6	4.3	3.3	2.8	BU*100	2.011	3.993	6.597	1.257
TEMP (C.)	-2.76	-2.50	-2.00	-1.07	15.	2.57	3.15	DTH/02	.2481	.2193	1191.	.0113
HS (H/S)	1.51	2.01	2.67	3.56	4.14	6.31	1.47	20/00	.2588	.1724	8411.	0162
		••	••	••	••	••				••	••	••
S16E	20.7	10.9	5.7	3.0	1.6		•	1 8	00.	00.	00.	00.
SIGA (DEG)	12.5	10.1	8.2	1.9	5.4	4.4	3.9	80*100	1.449	3.104	5.829	8.609
TEMP (C.)	-2.17							DT H/ D2	.2269	.2062	9491.	.0756
WS (M/S)	1.78	2.31	3.01	3.91	5.08	19.9	7.71	20/00	.2663	.1731	.1126	0025
		••	••	••	••	••		-		••	••	••
PEIGHT (M)	1.0	2.0	0.4	8.0	16.0	32.0	48.0		4.0	8.0	16.0	39.5*

CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSCN NO (1/L)*10 USTAR		TEM POIN (VISIBILI) (VISIBILI) (LOW MI	MID MID (8M) (8M)	-5. -11. 85 1 HI P= .4 W/CM2 .17(16 08SERV	.6 TOTL 0 II 46 6M) .27 VED DATA) 16M) .83		TEMP DEW POINT VISIBILITY ON MID LOW MID A=18 B= (4M)33 ( (39.192M) (4M)91 ( (4M)91 (	01 - 01 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	85 II 85 III W/CM W/CM W/CM W/CM			DEW POINT VISIBILITY VISIBILITY LOW MID LOW MID A=21 B= (4M)55 ( (39.192M)-7 (4M).2568 (	DE OF SEN	HI H HI H HVCM2 MW/CM2 -1.61(1)	5.0 5.6 10 10 10 10 10 10 10 10 10 10 10 10 10	.3.30 DATA)
HEIGHT (M)	- =	(DEG) (	WS TEM	TEMP SIGA	SIGE (DEG)	- :	MD DEG) (	WS TE	EMP SIGA		SIGE :	WO DEG )	WS T	TEMP S	SIGA DEG)	SIGE (DEG)
2. 4. 8. 8. 16. 16.				-1.70 -1.50 7.6 -1.32 6.9 -98 5.3		3.3:				8.5 7.9 6.1 5.1		143. 132. 129.	2.54 2.82 3.02 3.19	7.28	12.5	12.2
48. :	RES	136. FITTED	6.38 1 DATA	31.			151.	3.07	69		, m	135	3.41	2.98	6.5	2.5
			TEMP (C)	SIGA (DEG)	\$16E		WS (W/S)	TEMP (C)	SIGA (DEG)	A SIGE	3. E	WS (M/S)	TEMP (C)	-	SIGA DEG) (	SIGE DEG)
1.0		1.09	!		35.2		1.96	2.57		80		2.45			18	9.9
0.0		2.08	' '	6.4	7.5		2.28			:;		2.78			9-	7.0
16.0		3.95	88	4.6	3.4		2.66	2.27	5.0	9 10		2.96	6 6.87			7.2
32.0		5.44		3.6	٠.٠		3.01			. 4		W W				7.5
	"	70/na	DTH/D2	BU*100	R.I.		ZQ/NQ	DTH/02	BU*100	N RI	"	20/00	OTH/02	BU*100		=
4.0	-	.2261	.1245	1.664	.00			0321	350			.0586	1	393		===
16.0		1074	.0857	3.134	000		0317	0259	972	-2.67		.0312	111	-1.146		3.30
7116		00100		2000			2110.	0000	771.7				-	1.		11.

NOS	22/03/77 WEATHER	TIME	10:00:01	DATE 22	22/03/17		00.00	. DATE 2	77/03/77	TIME 1	12:00:00
USTAR : (4M).3	TY (M)  MID  MID  MID  28.96  (8M)  (8M)	855 I I W/CM W/CM 0.98( 0.30	10.0 -5.6 85 TOTL 0:L HI .09 CM2 81 LOM) -2.07 SERVED DATA1: 0 (16M) -1.37:	DEW P VISIB OW LCOW A=1 (4M) -1 (4M) -3	HUME O CENER	C 1 C 1 B 5 H I B F E C C C C C C C C C C C C C C C C C C	71 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DEW VISI COM (48)	mogr on	C 1 C 1 HI 85 HI P= MW/CM	5.0 6.7 TOTL 0 HI 2 16M)-4.90 RVED DATA) (16M)-3.22 (16M)-1947
HEIGHT (M) :(DEG)	WS TEM (M/S) (C)	TEMP SIGA (C) (DEG)	SIGE : WD (DEG)	_	MS T	EMP SIGA	SIGE (DEG)	: WD	WS T	EMP S C) (0	1GA S1GE 1EG) (DEG)
1. : 177. 3.77 2. : 177. 3.77 4. : 166. 4.22 8. : 163. 4.75 16. : 163. 4.75 32. : 166. 4.89 48. : 165. 5.03 LEAST SQUARES FITTED DATA		79 55 14 25 13 82 13 56 12 25 11 9	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	182. 171. 169. 168. 169.	3.00 12 3.00 12 3.50 11 3.69 11 3.82 11	12.96 12.32 17.1 11.97 16.2 11.68 14.7 11.32 13.2 11.06 11.9	22 22 25 26 26 26 26 26 26 26 26 26 26 26 26 26	186. 174. 168. 160. 155.	1.72 1.93 1.93 2.04 2.23 2.36 2.50	14.79 14.83 3(14.13 23 13.51 13.51 13.21 11	30.7 28.1 23.1 18.3 22.9 20.9: 15.7 19.4:
				SH	W (		SIGE				
HEIGHT (M) : (M/S	(3)	(DEG)	(DEG) :	(M/S)	3	(DEG)	(DEG)	(M/S)	3	(050)	(DEG)
1.0 : 3.68		16.4	. 1.4	2.90	12.	20.3	5.5	: 1.62			18.4
2.0 : 3.9	_	5	· 1.4	3.07	12.	18.6	1.9	: 1.75		32.3	
<b>41.4</b> : 0.4		13.9	5.4 :	3.25		17.0	8.9	1.89			18.9
8.0 : 4.40	-	2	6.1 :	3.45	12.	15.6	7.5	2.0			1.61
		11.8	7.0 :	3.65		14.3		: 2.2			
32.0 : 4.9	95 9.06	10.9	8.0 ::	3.87	11.13	13.1	9.8	2.39	9 13.39	16.9	19.8
100 :	10	17	. IA	20/00	DTH/D	80*100	1 -	20/00 :	10	10	12
4.0 : 0817	7 0637	205	06 :	. 0629	0687	357	-10	1640	0528	805	21
•		607	28 :	1	0574	-1.063	-, 55	.0265		-2.353	-2.18
10		287	-1.32 :	7710		2.300	-2.91	. 0143		-5.284	-12.53
	10050	-1.087	-1.84 :	0010	0062	2.184	-7.16	0088	0088	-7.830	-68.17

CLD (TENTHS) : DE CLD HT (M) : LOW EXPONENTS : A= NET RADIATION : (4M RICHAR DSON ND.: (4M USTAR : (4M			31.7	10.01	13:00:01	•	DATE 22	11/60/2				••
IS) :: LO ::		WEATHER	~					WEATHER	IER			••
10N LON LON LON LON LON LON LON LON LON LO		TEMP DEG	٠	16.7		••		TEMP DEG	0	17.8		••
IS) :: LO ::	DEW PO	POINT DEG	ں د	-8.4		•••	DEW PC	POINT DEG	9	-8.3		••
15) :: LO 10N :: P 1 ND:: C	S	>	1 8	2		••	-	>	-	85		••
100N			_		TOTL (	0:10	MO		Ī		TOTL 0	••
0	140	MID		Ħ			LOW	MID	•	H		••
NOI.	06	8=	15 P=	.10			A= .21	1 8=	14 P	90. =		••
		38.1	MW/CM2	M2		••				MW/CM2		••
01.	4M)-1-16		-3.37	( M91 )	(8M)-3.37(16M)-7.15		(4M) -	85 (8M)	11-2.	-2.56(16M)	-5.27	••
01.	39.192M1		1085	ERVED	(OBSERVED DATA)	:	(39.1924)	MI 00		(OBSERVE)	DATA	-
"   "	4M1-3.09	-	8M)-4.43		(16M)-4.69	:6	-		(8M)-3.38		(16M)-3.46	ö
	4M).1626	-	8M) -1708		(16M).1739		10. (M+)		(8M).0860		11.0841	=
	2	MS T	EMP	SIGA	SIGE		Q.	M.S	TEMP	SIGA	SIGE	
HEIGHT (M) :(DE	066) (	N/S) (	0 0	DEG.	(DEG)	:	DEG) (	(N/S)	3	(DEC)	(DEG)	-
1. :		1	5.85						16.1	3		
	193.	1.51	5.98	28.3		••	18.	.84	15.93	3 41.7		-
••	182.	1.63	5.88	28.2		••	8	.88	15.84	14		-
•	170	-	5 30	25.7	9		12	80	15 75			0
• •	180	•	5.16	23.0	24.		246.	82	15.88	1,4		2
	173.	•	4.67	25.3	10		250.	.95	15.61			0
•	176.	2.16	4.58	23.3	7		72.	1.09	15.4	59.	31.6:	
LEAST SQUARES FI	FITTED	DATA										
	3	TEME		164	SIGE		3	14	FMD	SIGA	SIGE	•
HEIGHT (M) :	(M/S)	3	0	DEGI	(DEG)		(M/S)	3	3	(DEG)	(DEG)	
1.0	1.38	15.94	200	4	14.8		18	15.	97	34.6	18.0	
	1.49	-			16.5		0	15.	96	30.0	20.7	
. 0-7	1.60	15		27.2	18.3		.87	15.	. ~	0.94	22.8	
8.0	1.72			0	20.3	••	16.			53.1	25.0	-
: 0.91	1.85	15.		6.	22.6		.6.	_	8	61.2	27.5	•
32.0 :	1.99	-		6.	25.1	••	.98	_			30.2	
. 0.84	2.07	7			26.7	••	1.00	-		16.8	31.9	-
o :	70/00	DTH/02		BU*100	R I		20/00	DTH/D2	:	BU*100	R.I	
	0386	0509	-1.083		36		.0113	0032		229	03	-
	.0207	0427	-3.142	•	.5.85	••	.0059	0026		.693	25	-
: 0.9	-0112	0261	-6.669	7	5.15	••	.0031	0015	•	1.427	89	•••
39.2* : .	.0125	******	5.4	445	00.	••	.0088	0000		0000	00	-

OBSERVED DATA															
•	DATE	: DATE 23/03/77 TIME 10:00:00	03/77 TIME	E 10:00	: 00:	DATE	DATE 23/03/77 TIME 11:00:00	7 TIME	11:00	1	DATE	23/33/77	: DATE 23/03/77 TIME 12:00:00	12:00	: 00:
• •		TEMP DEG C		15.6	• •		TEMP DEG C	EG C	16.7			TEMP DEG C	EG C	18.3	
•	DEW	DEW POINT DEG C		-8.9	••	DEW	DEM POINT DEG (	5 C	-9.5		DEW	DEW POINT DEG C	) EG C	-8.9	••
•	VIS	VISIBILITY (MI		85	•	VISI	VISIBILITY (MI)	( MI )	15		VISI	VISIBILITY (MI)	( KI)	35	
CLD (TENTHS) :	*07:	MID	Ŧ	TOTL		MO1:0	OIN	Ŧ	TOTL		MO7:0	MID 1 HI	IH 1	TOT	1:1
CLO HT (M) :	MOT :	Σ	OIW	IH	••	LOW	Iw	0	Ŧ		LOW	IN	0 4570	IH C	••
	A= -	A=15 B= .12 P=	.12 P=	.12	••	A= -	A=15 B=01 P=	-01 P=	60.	•	: A=	-8 80	A=08 B= .10 P= .10	.10	••
NET RADIATION :		59	29.73 MW/	CM2	••		34.	34.47 MW/CM2	M2	••		38.	38.10 MW/CM2	SMS	•
RICHARDSON NO.:	( M+)	15	BM)4	3(16M)	: 06	( M +)	50 (8	M)-1-48	-(W91)	3.08	(H)	08 (8	IM)23	3(16M)	: 14.
•	(39.	1-1M261	.61 (08	SERVED	DATA):	(39.1	92M1 ***	** (OBS	ERVED	DATA):	(39.1	92M)	40 (08	SERVED	SATA):
: 01*(1/1)	(M5)	43 (	BM)5	(M91) 6	:09	-(M4)	1.36 (8	4)-1.96	(16M)	-2.03:	( M & )	23 (8	IM)3	(16M)	32:
USTAR : (4M).3865 (8M).3867 (16M).3879: (4M).2887 (8M).2932 (16M).2921: (4M).6705 (8M).6540 (16M).6433:	(4h)	1.3865 (	8M1.386	7 (16M)	.3879:	(44)	2887 (8	M1.2932	(16M)	.2921:	(4H).	6705 (8	IM1 .654	( W91) C	.6433:
	0% :	X.S.	TEMP	SIGA	SIGA SIGE: WD	Q.	M.S	TEMP	SIGA	SIGE :	9	MS.	TEMP SIGA	SIGA	\$ 16E :
HEIGHT (M) :(DEG)	(DEC)	-	(3)	(930)	(DEG):(DEG)	(DEG)	(4/8)		(C) (DEG) (DEG):(DEG)	(DEG):	(DEC)	(N/S)		(DEG)	(050)
1.			15.47					7. 4					19.66		
2. :	171.	4.17			••	202	2.93	16.94			202	7.55	19.44		
. 4	161.	4.73	14.94	10.6	••	192.	3.19	16.40		••	192.	8.56	18.82	10.8	••
88	158.				6.5:	188.	3.35	16.11		3.4:	189.	9.23	18.37		4.7:
16.	159.				7.1:	187.	3.62	16.51		11.0:	188.	9.77	18.06		5.2:
32.	162.				7.9:	192.	3.84	15.60	11.3	10.1:	192.	10.25	17.64		5.4:
	158.	60.9	13.54	7.7	7.9:	185.	3.82	15.37		9.4:	189.	10.58	17.40	9.3	5.6:

LEAST SQUARES FITTED DATA	RES	FITTED (	DATA													
		SM	TEM		SIGE		K.S.	TEMP		SIGE		MS			SIGE	! "
HEIGHT (M)		(M/S)	(3)	(DEG)	(DEG)		(M/S)	(3)	(DEG)	(DEG)		(M/S)	(0)	( DEG )	(DEG)	••
1.0	••	3.98	15.29	-	5.1		2.80	16.85	18.8	10.2		7.29		11.8	3.9	
2.0	••	4.31	15.20	11.7	9.6	••	2.97	16.77	16.9	1001	••	7.82	19.28	1111	4.2	••
4.0	••	4.67	15.04	-	0.9	••	3.16	16.62	15.1	1001	••	8.38		10.5	4.4	••
8.0	••	5.06	14.73		6.5	••	3.35	16,35	13.6	10.0	••	8.99		6.6	4.8	••
16.0	••	5.49	14.22		7.1	••	3.56	15.91	12.2	10.0	••	9.64		9.3	5.1	••
32.0	••	56.6	13.63		7.7	••	3.78	15.42	10.9	6.6	••	10.34		8.8	5.4	••
48.0	••	6.23	13.62		8.1	••	3.92	15.44	10.3	6.6	••	10.17		8.5	9.6	••
		20/00	DU/DZ DTH/DZ	30*100	R 1		20/00	DTH/D2	901*119	R.I		ZG / NG	DTH/02	BU*100	1 %	! "
4.0		.1253 -	0695	173	03		.0634	0596	323	06		.1953	0884	067	04	! "
8.0	••	. 6190.	0582	495	22	••	.0337	+650	952	48	••	1901.	0735	195		••
16.0	••	.03680358	0358	-1.037	-1.25	••	- 6210.	1620	-1.988	-2.48	••	. 1950.	0437	405	23	••
39.2*	••	- 1810-	1800	-1.194	-2.55		0013	++000.	-1.554	-1.12	••	.0206	0050	239	20	••
	-															!

\* DBSERVED DATA

OBSERVED DATA	TA																
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSCN NO.: (1/L)*10		DATE 23/03/77  WEATH TEMP DE DEW POINT DE VISIBILITY (! LOW MID LOW MID A=13 B= (4M)05 (8M (4M)05 (8M (4M)15 (8M	DEW POINT DEG VISIBILITY (MI DW MID I DEG VISIBILITY (MI DW MID I DEG VISIBILITY (MI DW MID I		17 1 ME DEG C DEG C (MI) 8 (MI) 8 1 HI 1 HI 0 4570 • 45 MW/C 8M) - 14	TIME 13:00:00  TIME 13:00:00  C	13:00:00 : 19.5 : 5 TOTL 1: HI : 12 M2 (16M)29 : ERVED DATA): (16M)29 : (16M)20 : (16M)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23/03 TEME TEME PDINT IBILIT I MID 1830 03 B= 3 04 192M)	03/77 TIME 1 WEATHER MP DEG C 20 NT DEG C -7 ITY (MI) 40 ID HI 0 MID HI 8=01 P= . 32.24 MW/CM2 4 (8M)12(1 )22 (0BSER 3 (8M)17 ( 3 (8M)17 (	C 20.5 C -7.8 ) 40 HI TOTL MW/CM2 12(16M)2 (OBSERVED DAT 17(16M)2 6941(16M)2	0:00 TL 1: DATA):	DEW VISI	DEW POINT DEG C VISIBILITY (MI) WE MID H OW MID	3/03/77 TIME WEATHER TEMP DEG C OINT DEG C ILITY (MI) 30 MID MID AID 3 B= .03 P= 23.93 MW/CN .03 (8M)09( 2M)****** (08SE .09 (8M)13 952 (8M)13	23/03/77 TIME 15:00:00 WEATHER TEMP DEG C 21.1 POINT DEG C -8.3 BILITY (MI) 30 MID HI TOTL 03 B= .03 P= .12 23.93 MW/CM203 (8M)09(16M)1 192M)***** (OBSERVED DAT09 (8M)13 (16M)75	7:00 rL 0: DATA): 18: 18: 12: 12:
HEIGHT (M)		: WD	WS (M/S)		TEMP (C) (	S16A (DEG)	SIGE: WD	(DEG)	WS (W/S)	TEMP (C)	SIGA (DEG)	SIGE: WD (DEG):(DEG)	(DEG)	WS (M/S)	TEMP (C)	SIGA (DEG)	SIGE :
1. 2. 4. 8. 16. 32. 48.		196. 186. 183. 187.	8.31 9.42 10.20 11.06 11.78 12.10		20.12 20.04 19.41 18.98 18.59 18.07	10.5 10.0 10.0 10.0 10.0	44 v v	203. 194. 190. 192. 188.	8.17 9.24 10.04 10.87 11.55 12.02	20.65 20.05 20.00 19.73 19.39 18.97	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	24 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	207. 198. 196. 199. 198.	9.17 10.42 11.28 12.29 13.20	21.15 21.03 20.49 20.20 19.90 19.50	6 9 12.6 9 12.6 0 13.9 8 13.6	4 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
LEAST SQUARES FITTED DATA  : WS  HEIGHT (M) : (M/S)	S	FITTED WS (M/S)	D DAT	TEMP (C)		SIGA DEG)	SIGE :	1 2	WS 1	TEMP (C) (	SIGA (DEG)	SIGE :	=	WS (M/S)	TEMP (C)	S1GA (DEG)	SIGE :
		7 80		10.05	-	, ,	2.8	-	7 73 20	20 50				0 77 30	20 07		3 0

		••	••	••	••	••			! "	••	••	
SIGE (DEG)	3.9	4.0	4.1	4.2	4.3	4.4	4.4	۳. ت	03	+00-	18	03
S1GA (DEG)	12.0	12.2	12.5	12.8	13.0	13.3	13.5	BU*100	035	100	206	110
TENP (C)	20.97	20.88	20.72	20.41	19.90	19.33	19.35	DT H / DZ	1690	7750.	0348	.0038
WS (M/S)	8.72	6.45	10.25	11.11	12.04	13.06	13.69	ZQ / NQ	-27762	- 1641.	- 1180 -	.0025
		••	••	••	••	••				••	••	••
SIGE (DEG)	5.1	5.1	5.0	2.0	4.9	6.4	4.9	RI	02	06	25	22
SIGA (DEG)	0.6	9.5	4.6	9.6	7.6	6.6	10.0	80*100	051	144	296	210
TEMP (C)	20.59	50.49	20.30	19.96	19.40	18.77	18.80	DTH/DZ	.0783	0654	0396	0056
(M/S)	7.73	8.38	9.10	9.87	10.71	11.63	12.20	20/00	.2482	-1347 -	- 1870.	. 0294
		••	••	••	••	••	••			••	••	••
SIGE (DEG)	3.8	4.0	4.2	4.5	4.7	2.0	5.1	1 ~	02	07	29	18
SIGA (DEG)	12.2	11.2	10.2	4.6	8.6	7.9	7.5	BU*100	057	162	338	159
TEMP (C)	19.95							DT H/DZ	1060.	0760	99+0.	++000.
(W/S)	7.89	8.55	9.26	10.04	10.88	11.79	12.36	20/00	.2485 -	-1347 -	- 0730 -	- 0020
	••	••	••	••	••	••	••			••	••	••
HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0		6.4	8.0	16.3	39.5*

CBSERVED D	CATA																
		DATE	23/ TE			0.00:00	DATE 2	23/03/77 WEATHER TEMP DEG	11 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17:00:00 9.5		w 3	23/03/77 WEATHER TEMP DEG	E S S	ME 18:00:00 8D 18.3	00:0	
CLD (TENTHS) CLD HT (M) EXPONENTS		VISI LOW LOW	VISIBILITY WIDOW WIDOW	[M]	1 2 I	TOTL 0	SI	MID MI	HI 3			VISI	, E	(MI) 1 HI 10 305	3 4 TO HI	TL 5	
NET RADIATION RICHARDSCN NO- (1/L)*10 USTAR	89	(44) (48)	192M) 192M) 03	2.70 (8M) (8M) (8M)	CM2 3(16 SERV 6 (1	06 DATA) 05	(39.1 (4M) (4M)	-3.28 .00 (8M) 2M)20 .00 (8M) 344 (8M)	.00( (085E	. A O .	000 : TA): 624:	2622	-1 01 03 53		CM2 34.16 SERV 5 (1	.06 DATA)	
HE IGHT (M)		: WD	WS/W)	TEMP (C)	P SIGA	SIGE (DEG)	: WD	WS TE	EMP SIGA	GA SIG	я 6	WD (DEG)	WS (W/S)	TENP (C)	\$16A (DEG)	SIGE (DEG)	
1. 2.		198.	10.01	202		5	202		40	6.9		201.	8.65	17.97			
8 9			12.54		86 6.8	6.4.0			9.35	2.0	.1:	188.	10.89	18.09	8.5	4.5	
32.		1	14.91	1 19		4 4	!	33 1	111.87		3.7:	191.	13.31	18.13		3.5:	
LEAST SQUARES	IRES .		FITTED DATA	A TEMP	SIGA	SIGE	N.	TER	P SIGA	IS	98	3		G E	SIGA	SIGE	
HEIGHT (M)	1	E	151	2	(DEG)	W 1	S/W) :	2)	(DEG)	10E	-	(M/S		3	(DEG)	ш 1	1
1.0				20.25	8.3	5.0	9.32	19.	6.5	4.7		٠٠	7:	-82			
	• ••			20.12	::			19.3	5.8	•		•	.71 17.	.91	6.3	4.0	
0.8	•• ••	13		19.95	9.9	4.5	12.05	19.	5.5	4.1		10.81	81	10.			
32.0	••••	4 5		19.25	5.6		14.31	19.	4.9	m m		13.	23 18	.92		3.7	
	"	20/00	1	DTH/DZ	BU* 100	RI	20/00 :	DTH/02	80*100			20/00	Z DTH/DZ	N8 20	001+0	1.8	1
0.8		.3430	9 0321		013	01	.3166		000	888		.1825			.020	888	
39.2*	••	.0213		. ~	-1199	-:17	0288	0050	122	-10		.036	6100 6	•	. 053	.05	

8888

.286

.0584

.2811 .1626 .0940

0000

.085

.0390

.3096 .1778 .1021

0000

.186

.0575 .0377 .0063

.3142 .1790 .1020 .0575

8.0 16.0 39.2

6690

	-				1		1	1	!						1	1	1	;
	••	DATE 23	23/03/17	TIME	00:00:61	00:0	·	DATE 23/		LIME	20:00:00	. 00	DATE	23/03/11		11ME 21:	21:00:00	••
	••		WEATHER		•				WEATHER	٥				WEATHER	HER			••
	••	-	TEMP DEG	3 0	16.7			TE	TEMP DEG	C 15.0	0.	••		TEMP D	DEG C	13.9		••
	••	DEM PO	POINT DEG	0 0	1111			DEW POI	POINT DEG	c -11.1	1,	••	DEW	POINT D	DEG C	-101-		••
	••	VISIBILITY		(MI)	4			SI	BILITY (MI)			••	VISI	VISIBILITY	(MI)	1		••
CLD (TENTHS)	:	.LOW		H Z	4 TOT	TL 6	*LOW		2	HI 4	TOTL	1:9	MO		6 HI	4	TOTL 1	:0
	••	LOW	HID	305	O HI	7620		LOW	MID	3050 HI	1 762	. 0	LOW	MID		190 HI	7620	••
EXPONENTS	••	A=19	B=17	17 P=	.19		: A:	=13	B=04	P=	.20		·	20 8= -	14	P= .21		••
NET PADIATION	 z		7		.M2				10.	MW/CM		••		-6-		MW/CM2		••
RICHARDSON NO.	0	( 4M)	.02 (8M)		(16M)	.12		0. (M4	.02 (8M)	.06(16		.13 :	( M )	.03 (8		.08(16M)	1 .15	••
	••	19			( OBSERVED D	DATA	-	19		OBSERVED		DATA):		_	-	OBSERVED	DAT	:
(1/1)*10	••	(4H)	-		1 (16M	, 22:	_	_	_	.16	-	.23:		1		.20 (16M	-	
USTAR	••				8 (16M	1.4177:	_	4.	_		•	3875	-	-	.3		.3	.6
		G.K	MS T	TEMP	SIGA	SIGE		Q.M	WS TE	EMP SIGA	!	SIGE :	Q.X	MS	TEMP	SIGA	SIGE	! "
HEIGHT (M)	:	_	_	(3)	DEG	(DEG):	-	DEG) (M	/5) (	_		(DEG):	(DEC)	(N/S)	5	-		::
1				15.46					14	4.40					13.8	4		! "
2.	••	198	6.31	5. 78	7.7		-	188.	5.87 14		0.5	•	192	5.03	14.	3 6.	•	•
; ;	•••	188.		15.70	8.0		-		.77		5.7	•••	182	5.83	14.09			•••
	••			16.11	4-9	4.7			55		8	4.7:	180.	6.59	14.5	52 5	2 4.7	
16.	••			16.40	5.8				8.59 15	5.37	5.2	4.1:	185.	7.56	14.80		9	
32.	••	-		16.57	5.0						8	4.1:	186.	8.86	16.0		•	
48.	••			16.51	4.4	3.4:			1.24 15	64	4.8	3.8:	185.	16.6	14.92	3.	6 3.2	2
			1				1											
LEAST SQUARES	RES	FITTED DATA	DATA															
	••	WS	TEMP		SIGA	SIGE		MS	TEMP			1GE :	3		LENP	SIGA	SIGE	
HEIGHT (M)	••	(N/S)	5	-	DEG.)	(DEG)		(M/S)	(3)	(DEG)		DEG1 :	(M/S		3	(DEG)	(DEG)	••
1.0		5.53	15.59		9.4	6.7		5.07		7.6	4	: 9.4	4.31	13.97	76	8.0	5.7	! "
2.0	••	6.30			3.3	6.6	••	5.82	14.59	7.0	4	. 5.4	4.	40.41 66	*0*	7.0	5.1	••
4.0	••	7.18			7.3	5.3	••	6.68		4.9	. 4	.3 :	5.17		91	1.9	4.7	••
8.0	••	8.19			4.9	4.7		1.68		5.9		. 2.	6.68	_	4.39	5.3	4.2	••
16.0	••	9.33			9.6	4.2		8.82	15.	5.4	4	.1.	7.	14	14	4.6	3.8	••
32.0	••	10.63	16.		2.0	3.7	••	10.13	-	6.4	3	. 6.	8	.93 15.	.07	4.1	3.5	••
48.0	••	11.48	3 16.47		9.4	3.4		10.98	-	4.7	3	. 6.	.6	-	88	3.7	3.3	••
	-	20/00	DTH/DZ	80	*100	8.1		Z0/00	DTH/02	80*100	O RI		20/00	Z 07H/0Z	!	BU*100	12	! "

OBSERVED DATA	A														
	: DAT	DATE 23/03/77	Ē	4E 22:00:00		DATE	: DATE 23/03/77	1	TIME 23:00:00		DATE	: DATE 24/03/77 TIME	TIME	00:00:00	: 00:
	••	MEA	WEATHER		••		WEATHER	HER BO				WEATHER	HER BD		••
		TEMP DEG C	DEG C	14.4			TEMP DEG	EG C	11.0			TEMP DEG	၁ <u>၅</u>	6.8	••
	: DE	DEM POINT DEG	DEG C	-7.8	••	DEW	DEW POINT DEG	5 C	-1.2		DEN	POINT DEG	٠ ٢	-2.2	••
	: VI	VISIBILITY (MI)	CHI	7	••	VISIBI	BILITY	( IW)	3	••	VISI	BILITY (	HID	3	•
CLD (TENTHS)	MO7:	MID	1H 01 01W	TOTL	L 10:LOW	MO	MID	IH 01	TOT	10:1	MO.	MID	IH O	TOT	F 10:
CLD HT (M)		I	10 305	IH O	••	LOW	MID	0 3050	Ħ	••	LOW	MID	3050	Ŧ	••
EXPONENTS	. A=	20 B=13 P=	13 P=	.20		A=16 B=	- =8 91	03 P=	61.		A=	29 8=28	.28 P=	•15	••
NET RADIATION		4-	-4.33 MW/	/CM2	••		-3.98	98 MW/CM2	M2	••		-3.6	.98 MW/CM2	M2	••
RICHARDSON NO.	( 4M)	10.	•	03(16M)	: 90.	( W + )	(M8) 10.	M) .03	(16M)	: 40.	( <del>4 H</del> )	.01 (8M)		(16H)	: 40.
	••	.192M)	0	SERVED	DATA):	(39.1	92M1	08 (085	ERVED	DATA):	(39.192M)			COBSERVED	DATA):
(1/1)*10	# (4M	(4M) .03 (8M)	•	. TO. (M91) 50	.07:	(4M) .03	.03 (8)	(8M) .05	.05 (16M)	.05:	(H4)	.02 (8M)		(16M)	.04:
USTAR	. (4M	(4M) 4048 (8M)	8M).3843	3 (16M)	.3684	(4H)	.3807 (8)	(8M),3594 (16M)	(16M)	.3581:	(4H)	5667 (8M)	0.5352	(164)	. 5057:
	G.	E S	TEMP	SIGA	SIGE: WD	2	S.	TEMP	SIGA	SIGE :	9	N.S	TEMP	SIGA	SIGE :
HEIGHT (M) :(DEG)	: ( DEG	(M/S)		(DEG)	(DEG): (DEG)	(DEC)	(M/S)	(3)		(DEG): (DEG)	(DEC)	(N/S)	(3)	DEGI	(DEG):
1.			10.59					9.46					8.26		
2.	: 321	49.4	10.69	8.8	••	308.	4.03	9.55	8.8	••	352.	6.84	8.36	6.7	••
+	: 311			7.7	••	297.	5.94	2.47	7.8	••	343.	7.85	8.26	5.4	••
8.	: 311			6.7	4.4:	295.	4.07	9.58	7.4	4.2:	340.	8.60	8.39	5.4	3.9:
16.	: 314			6.1	3.8:	298.	86.9	9.57	6.3	3.1:	343.	9.75	8.39	3.4	3.1:
32.	: 312	. 8.15	10.70	5.0	3.4:	296.	7.50	9.45	5.4	3.8:	343.	10.70	8.27	3.2	2.5:
48.	: 310			4.5	3.6:	294.	8.08	9.24	5.5	3.8:	340.	11.04	8.09	2.7	2.4:

LEAST SQUARES FITTED DATA	RES	FITTED	DAIA												
HEIGHT (M)		WS (M/S)	TEMP (C)	S I GA ( DEG )	SIGE (DEG)		(S/W)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		(S/N)	TEMP (C)	\$16A (DEG)	SIGE (DEG)
1.0		4.20	!	10.3	5.6		3.99		6.6	4.0		6.27	8.30	8.4	6.9
2.0	••	4.82	10.62	8.9	5.1		4.56	9.50	8.9	3.9	••	6.97	8.30	6.9	5.7
4.0	••	5.53		7.7	4.7		5.20		7.9	3.9	••	7.74	8.32	5.7	4.6
8.0	••	6.34		1.9	4.3		5.93		7.1	3.8		8.60	8.35	4.6	3.8
16.0	••	7.28		5.8	3.9	••	6.77		6.3	3.7	••	9.56	8.37	3.8	3.1
32.0	••	8.35		5.1	3.6	••	7.73		5.7	3.6	••	10.62	8.30	3.1	2.6
48.0	••	60.6		4.7	3.4		8.35		5.3	3.6	••	11.29	8.08	2.8	2.3
		20/00	DT H/DZ	80*100	۳.		20/00	DTH/DZ	80*100	R.		20/00	DTH/D2	BU*100	I.
4.0		.2543	.0211	.038	00.		.2294	.0165	.034	00.		.2723	1710.	.016	00.
8.0	••	.1459	6210.	860.	00.	••	.1309	.0134	.084	00.	••	.1513	1410.	.042	00.
16.0	••	.0837	9110.	.193	00.	••	.0747	.0072	.139	00.	••	.0840	1800.	610.	00.
39.2*	••	.0675	9000	*00	00.	••	.0362	0031	276	16	••	.0213	0013	057	10

\* ORSERVED DATA

5.0 0.2 0.2 TOTL 10 HI 15 16M) .38 RVED DATA) (16M) 1.59	SIGE (DEG)	0 4 W W 4 9	\$16E (DEG)	1.9	4.7	4.2	3.5	3.0	18	
	SIGA (DEG)	F. 0 W 4 W V	SIGA (DEG)	9.2	6.2	5.1	3.4	3.0	8U* 100	.289 .457 .829
THER DEG CHI CHI CHI CHI CHI CHI CHI CHI CHI CHI	WS TEMP (M/S) (C)	7.20 3.51 8.25 3.36 9.23 6.26 11.09	TEMP**	2.06	4.04	5.04	7.02	7.60	DTH/DZ 8	.3417 .1658 .0925
DEW POINT VISIBILITY VISIBILITY LOW 10 MID LOW 1830 M A= -29 B= (4M) .16 ( (39.192M)** (4M) 1.33 ( (4M) 1.33 (	WD DEG) (M	22. 7 14. 8 5. 9 9. 10 12. 11	WS (M/S)	6.67	8.17	40.6	10.01	11.75	20/00	.1530
7.2 0.8 TOTL 10 HI .14 2 16M).07 RVED DATA) (16M).09	SIGE (DEG)	3.00.00	SIGE (DEG)	7.6	5.5	4.3	3.0	5.6	RI	
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	SIGA (DEG)	.39 7.0 .20 6.0 .07 4.8	SIGA (DEG)	8.2	1.9	5.3	0.4	3.7	8U*100	.051 .093 .126
THER DEG ODEG (MI MI MI MI MI MI MI MI MI MI MI MI MI M	WS TEMP	9.07 4.3 0.31 4.5 1.52 2.72 5.0 4.01	TEMP**	3.95	4.47	4.72	5.24	5.39	DTH/DZ E	.0950 .0525 .0217
DEW POINT VISIBILITY VISIBILITY VISIBILITY VISIBILITY VISIBILITY COW 10 MID LOW 1830 M A=21 B= (4M) .03 -16 (4M) .03 +4 (4M) .11 (4M)	ND PEG (M)	10. 9 1. 10. 353. 11. 359. 12. 12. 14. 350. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14	WS (W/S)	8.42	10.25		13.77	+	0 70/00	.3369 .1859 .1026
8.2 1.3 TOTL 10 HI .16 2 16M) .03 RVED DATA) (16M) .03	SIGE (DEG)	4 4 4 4	SIGE (DEG)		4.5		. w	3.3	3.1	888
( 80 8.2 C -1.3	\$16A (DEG)	2432425 - 32442 - 32442 - 34802	SIGA (DEG)		6.5			3.7	BU*100	.015 .038 .069
A T T DEG T T DEG T T DEG T T MID MID MID (8M) (8M) (8M) (8M)	WS TEMP	7.56 6.36 7.64 7.84 7.65 7.84 7.65 8.98 7.64 0.48 7.32	TEMP (C)	7.59	7.61	7.62	7.52	7.31	DTH/02 8	.0133 .0109 .0061
TE TE 10 M POI 10 M P	3		WS (M/S)	5.72	7.12	7.95	9.90	10.56	0 70/00	.2610 .1456 .0812
A P B B B B B B B B B B B B B B B B B B	: (DEC)									
			£							
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (1/L)*10 USTAR	HEIGHT (M)	1. 2. 4. 8. 16. 32. 48.	1 -	1.0	0.7	8.0	32.0	48.0		6.0 8.0 16.0

\* OBSERVED DATA \*\* Least squares fit of log height versus linear temperature

	:	DATE 24	/03/77	TIME 04:	00:00
	:		WEATHER	RW-	:
	:	T	EMP DEG	C 2.8	:
	:	DEN PO	INT DEG	C 0.0	:
	:	VISIBI	LITY (MI		:
CLD (TENTHS)	:1	OW 10	MID	HI T	DTL LO:
CLD HT (M)	:	LOW 15	25 MID	HI	:
EXPONENTS	:	A=21	B=26	P= .19	:
NET RADIATION					:
RICHARDSON NO.		(4M) .			.95 :
	:			( OBSERVE	
(1/L)*10	:			7.35 (16	
USTAR	:	(4M) 15	11 (8M)	1259 (16	4) .1005:
	:	WD	WS TE	MP SIGA	SIGE :
HEIGHT (M)	: (	DEG) (	M/S) (C	) (DEG)	(DEG):
1.	:				:
2.	:	25.	3.88 3	.47 7.	2 :
4.	:	16.	4.50 3	.32 6.	6 :
8.	:	10.	5.09	5.	7 4.5:
16.	:	15.	5.85 6	.93 5.	2 3.7:
32.	:	17.	6.66	4.	2 3.0:
48.	:	14.	7.16	3.	7 2.9:
LEAST SQUARE	S	FITTED	DATA		
	:	WS	TEMP	** SIGA	SIGE :
HEIGHT (M)	:	(M/S)	(C)	(DEG)	(DEG) :
			1 67		7 7
1.0	:	3.42	1.67	8.7	7.7 :
2.0	:	3.91		7.5	6.4 :
4.0	:	4.46		6.5	5.4 :
8.0	:	5.10	5.40	5.6	4.5 :
16.0	:	5.82	6.65	4.9	3.7 :
32.0	:	6.65	7.90	4.2	3.1 :
48.0	:	7.19	8.63	3.9	2.8:
		211.407		DUA 100	
	:	DU/DZ	DTH/DZ	BU*100	RI:
4 ^		1004	.4250	1.208	
4.0	:	.1986	.4250	1.883	
8.0	:	.1135	.1142	3.023	
16.0	:	.0648	.1142	3.023	
39.2	:	.0313			•

OBSERVED DATA	TA																		
	. DA	DATE 25/0	25/03/77	TIME	12:00:00	00:	: DATE		25/03/77	TIME	13:00:00	00:0		DATE 2	25/03/77		FIME 14:00:00	0:00:	. 0
		-	WEATHER						WEATHER	~			••		WEAT	WEATHER			••
		TEM			3.9			TE	TEMP DEG	ں	9.6		••			DEG C	6.7		••
		DEM POIN			.0.3		30 :	DEW POINT D	NT DEG	J	-1:1-		••	DEN P		DEG C			••
	>	VISIBILITY		1 20				SIBIL	ITY (MI)	2	•			VISIBILITY	ILITY	E	30		••
CLD (TENTHS)	*COM	4 MID	10	H	TOT	10:	7	20	MID 6	Ξ	TOTL	7	9:10	6 MO	MID	H		TOTL	6:
CLO HT (M)	97		OIN	20	H		HOT :		1220 MID	3050	Ŧ				1830 MID	9	Ħ		••
EXPONENTS	. A=	•	0	P=	+1.		: A=	:	-	5 P=	.03		A	•	03 8=	32	P= .00	•	**
NET RADIATION	••		33.00	MW/CM2	2		••		50.73	MW/CM2	12				54.	.59 MM	MW/CM2		••
RICHARDSON NO	.: (4M)	M)08	( 8M)		6M3	-2.88	14) :	4M1-14.	-	-44.91	(H9	-98.3		** ( W 5	8) ****	1	***( 16M)**	1)***	**
	: (3	-	-	( 38SE	BSERVED (	DATA	_	39.1924	-		COBSERVED			39.19	m		ш	ED DA	TA):
(1/L)*10 USTAR		(4M)23	(8M)	62	(H91)	1-1.90:		4M)-36.9	(8 W)	-58.8	(16M)	-61.4		(H)		(8H)	== <b>!</b>	(16M)**** (16M)	*
			WS TEMP	!	SIGA	SIGE	3		-	ENDS	SIGA	SIGE		2	¥S	TENP	SIGA	!	S 1 GE :
HEIGHT (M)	: ( DEG )	Ξ				(DEG):	0	E	181	-	DEG.)	(DEG)	::	DEG.	(N/S)	3	-		(DEG):
1.			3	3.82						4.61						5.4	3		!"
2.	: 320.			11.	13.6		: 336.			4.44	46.9		-	162.	1.25	5.28	1.69 8	1.	••
.,	: 310				13.4		: 326.			3.97	4.64			152.	1.24	4.89		9	••
8.	: 304				13.9	10.7				4.05	9119	19.2		48.	1.23	4.8			19.4:
16.	: 313		2.35 3	3.10	13.3	10.4			1.47	3.84	39.4	19.5		156.	1.38	4.73			23.9:
32.	: 31.				13.1	11.3				.5		25.1	••	138.	1.33	4.5	2 19.0		31.0:
48.	: 313				14.8	11.1	: 313			3.39	19.4	23.		159.	1.17	4.5			33.6:
I FACT COLLABES		FITTED DATA	14								r								
			-		-		-						-		-	-		-	-
	••	MS	TEMP	SI		SIGE	••	NS	TEMP			SIGE	••	MS		TEMP	SIGA	SI	\$ 16E :
HEIGHT (M)		(N/S)	3	100	DEG) (1	DEG)		M/S1	3	CDE	DEG) (	DEG		CM/S		(0)	(DEG)	(DEG)	
1.0		1.61	3.59			8.6		1.32	4.41	76.	+	3.6		1.26		•25	6.59	10.	1
2.0	••	1.77	3.58	13.		0.0		1.35	4.36			15.2	••	1.26		12.	67.2	12.	
0.4		1.95	3.54	13.		0.2		1.38	4.27			16.8	••	1.2		115	68.5	15.	. 9
8.0		2.14	3.47	13.		0.5		1.40	4.10			8.7	••	1.2		95	8.69	19.	
16.0		2.36	3.25	13.		8.01		1.43	3.82	30.1		20.8	•• •	1.27		4.69	71.2	24.	
36.0		4.27	66.7			0.1		04.1	5.40			1901		7.1		40	12.0	30.	
48.0		41.7	1:21	13.	. 6.	7.11		1.48	3.43	20.	8	24.6	••	1.27		20	13.4	34.	2 :

\* OBSERVED DATA

-.04

-1.149 -3.577 -6.254 36.387

-.0324 -.0253 -.0111

.0000

- 52 - 6 - 98 - 8 - 08

-.986 -3.139 -7.060 -1.630

.0091 -.0330 .0046 -.0273 .0024 -.0160

.0617 -.0082 -.122 -.04 .0339 -.0148 -.734 -.46 .0186 -.0282 -4.618 -12.87 .0137 -.0781 -60.409\*\*\*\*\*\*

4.0 8.0 16.0 39.2

2

DTH/DZ BU\*100

20/00

R

DU/DZ DTH/DZ BU\*100

2

BU\*100

DU/DZ 0TH/DZ

```
: DATE 25/03/77 TIME 15:00:00 :
                            WEATHER
                         TEMP DEG C
                 : DEW POINT DEG C -1.7
                : VISIBILITY (MI) 30
CLD (TENTHS) :LOW 8 MID HI TOTL
CLD HT (M) : LOW 1830 MID HI
EXPONENTS : A= -.12 B= .24 P= .09**
NET RADIATION :
                            41.66 MW/CM2
RICHARDSON NO.: (4M) -2.09* (8M)-1.91*(16M)-75.5 :
                : (39.192M)***** (OBSERVED DATA):
              : (4M) -5.52* (8M) -2.50* (16M)-49.4 :
    (1/L)*10
                : (4M) .1843* (8M) .1665* (16M).3230 :
   USTAR
                : WD
                          WS TEMP SIGA SIGE :
  HEIGHT (M) : (DEG) (M/S) (C) (DEG) (DEG):
 :
                                  6.27
        1.
        2. : 154. 1.62 6.08 21.5
        4. : 142. 1.64 5.70 20.9 : 8. : 133. 1.84 5.54 19.1 12.4:
        8.
            : 135. 1.85 5.38 19.2 12.0:
       16.
           : 126. 1.78 5.20 16.5 16.2:
: 115. 1.74 4.97 14.5 18.5:
       32.
       48.
  LEAST SQUARES FITTED DATA
  : WS TEMP SIGA SIGE: HEIGHT (M) : (M/S) (C) (DEG) (DEG):
     1.0 : 1.63 6.06 24.3 6.9 : 2.0 : 1.66 6.00 22.4 8.2 : 4.0 : 1.69 5.90 20.7 9.7 : 8.0 : 1.73 5.71 19.1 11.5 : 16.0 : 1.76 5.40 17.6 13.6 : 32.0 : 1.80 5.04 16.3 16.1 :
     16.0
      32.0
      48.0 : 1.82 5.03 15.5 17.7 :
               : DU/DZ DTH/DZ BU*100 RI :
     4.0 : .0111 -.0386 -.756 -.02 : 8.0 : .0056 -.0317 -2.390 -.32 : 16.0 : .0029 -.0180 -5.207 -3.90 : 39.2* : -.0025 -.0044 -7.623 -23.51 :
```

LIME 11:00:00 :	••	•	••	••	TOTL 9:	7620 :	••	••	: ***- (1	D DATAL :	M)30:	4140 (16M).4197:	1	(DEG):			. 4		.1 5.1:		
E 11:		:	-12.2	20	1 1	Ŧ	.15	MW/CM2	22(16M	SERVE	911 1	91) 0	SIGA	(C) (DEG)				9.8			
	1ER	DEG C	J 9	HI	Ŧ	•	07 P=	/MH 99.		90) 56	113	(BM).414	TEMP	3		1.36	.88	.57	91.	12	43
28/03/77	WEATHE	TEMP DE	DEW POINT DEG (	VISIBILITY (MI	8 MID	-	18 8= -	-	(4M)08 (8M)	92M)-1.	24 (8)	(4M).4115 (B)	MS	(N/S)		4.45	5.31	5.83	67.9	7.07	7.28
DATE			DEN	VISI	10	LOW	A=		(+H)	(39.1			9	( DEC )		316.	304	295.	303.	302.	•
: 00:	••	••	••		1:6	1620 :		••	. 22. :	SATA):	15:	1.4875:	SIGE : WD	1 DEG) :		••	••	4.2:	3.5:	3.8:	
TIME 10:00:00		0.2	1111-	0	1 TOTL	HI 7	97.	M2	· (M91)11.	OBSERVED DATA!	(164)	4816 (16M).	!	( DEC )		10.0	8.3	1.4	6.2	9.6	0.
TIME	ER	J	ی		Ħ		-0 80	6 MW/CM		_	•			(3)		*0.	94	09	16	-1.32	-1.54
DATE 28/03/77	WEATHE	TEMP DEG	POINT DEG	VISIBILITY (MI)	B MID	1525 MID	22 8=	9.	04 (8M)	2M)0	.13 (8M	(4M) .4819 (8M)	N.S.	(N/S)		5.53	90.9	96.9	7.88	8.26	9.56
DATE 2			DEW P	VISIB	.OW 8	LOW	A=2		- (M+)	(39.19	(4H)	4. (M)	!			327.	315.	308.	315.	315.	•
: 00:	••	••	••	••	1:1	••		••	: +1	DATA):	10:	.5062:	SIGE :	( DEG) : ( DEG)	*	••	••	4.5:	3.7:	3.6:	.0.
00:00:60		9.0-	6.01	0	TOT	H	.17	M2	(16M)	ERVED	(16M)	(16M)	SIGA	DEGI		1.9	6.7	5.6	5.2	4.7	•
TIME	1ER	J 9		•	Ŧ	•	-16 P=	MM/C	10 11	14 (085	11 - 11	11.4967	TEMP	-		31	70	83	-1.16	-1.55	-1.78
DATE 28/03/77	WEATHER	TEMP DEG C	DEM POINT DEG (	VISIBILITY (MI	MID	1525 MID	19 8= 16 P=		(4H)03 (8H)07	(39.192M)04 (085)	08 (8)	14M1.4948 (8M1.4967	NS	(M/S)		5.73	6.23	7.26	8.30	8.99	9.95
DATE 2			DEW P	VISIB	:LOM 7		A=		(4H)	(39.19	(4H)	(4M).4	Ş	: ( DEG )		326.	315.	307.	314.	313.	•
	••	••	••	••		••	••	: NOI	ON	••	. 0	••	-		-	••	••	••	••	**	••
					LO (TENTHS	CLD HT (M)	XPONENTS	NET RADIATION	RICHARDSON NO.		(1/1)*10	USTAR		HEIGHT (M)	1.	2.	.,	8	16.	32.	48.

. HEIGHT (M) :															1
IGHT (M) :	MS	TEMP		SIGE		MS	TEMP	SIGA	SIGE		MS	TEMP	SIGA	SIGE	
	(M/S)	3	(DEG)	(DEG)		(H/S)	3	(DEG)	(DEG)	••	(N/S)	9	(DEC)	(DEC)	
1.0	5.02	32	8.8	6.1		4.95	.01	11.6	4.8		4.17	1.35	1.41	6.3	
2.0 :	5.66		7.7	5.5		5.52	06	0.01	4.5	••	4.63	1.26	12.4	0.9	
. 0.4	6.39	52	8.9	4.9	••	91.9	21	8.6	4.3	••	5.13	1.09	10.9	2.1	
8.0	7.21		5.9	4.4		6.88	14	7.4	4.0	••	5.69	111.	9.6	5.4	
: 0.91	8.14	ò	5.2	3.9	••	7.68	92	4.9	3.8	••	6.32	.24	8.4	5.5	
32.0 :	61.6		4.6	3.5		8.57	-1.44	5.5	3.6	••	10.7	35	1.4	4.9	
. 0.84	9.86	-1.74	4.2	3.2		41.6	-1.49	5.0	3.5	••	7.45	34	6.9	4.8	
	20/00	DU/DZ DTH/DZ	BU*100	1.8		70/00	DTH/D2	BU*100			20 / NO	DTH/D2	BU*100	۳. ا	
. 0.4	.2585	0505	071	03	!	.2263 -	.0585	088	+0		.1778	0724	157	40	
8.0	.1459	.14590427	189	100-		-1263 -	1650.	239	===	••	- 9860 -	0605	427	22	
: 0.91	.0823	0272	378	29		- 6070.	.0304	475	+++-	••	. 1450.	0367	844	88	
39.5* :	0090	++00*-	273	23		- 9290.	.0037	274	21	••	. 1610.	********	-1.007	-1.95	

\* OBSERVED DATA

7L 6: DATA):	SIGE :		SIGE :	004444 0087046	RI :- 004 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 :: - 100 ::
C 6.4 C -14.4 ) 30 HI HI P= .16 MW/CM2 10(16M)2 (085ERVED DAT 14 (16M)4	P SIGA	2.98 2.73 13.3 2.22 11.5 2.02 11.6 1.69 11.5 1.05 9.9	SIGA (DEG)	14.4 12.5 11.7 10.9 9.8	6U*100 083 224 456
17 (MI)  19.89  19.89  19.89  10.89  10.89	WS TEMP	5.76 2. 5.70 2. 7.38 2. 8.18 1. 9.20 1.	TENP (C)	2.62 2.48 2.22 1.78 1.24	07H/DZ 0571 0483 0308
DATE 28/03/ WEA  TEMP DEW POINT VISIBILITY OW 6 MID LOW 1525 MA10 B= (4M)04 ( (39.192M)11 ( (4M)11 (	WD DEG) (	291. 5 281. 5 280. 8 280. 8 0. 9	WS (M/S)	6.26 7.01 7.85 8.79	2365 - 1324 - 0741 - 0319 -
35 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	SIGE :	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	SIGE :	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	RI - 0 0 4 - 2 3 3 3 3 5 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1
3.2 -14.3 20 2 TO 2 TO 7 CM2 1 CM2 1 CM3 2 3 (16M) 3 2 (16M)	SIGA (DEG)	.75 .56 18.7 .98 17.9 .70 18.3 .28 17.4 .86 15.9	SIGA (DEG)	19.9 19.1 18.4 17.7 17.1 16.4	BU*100 162 8443 895
2477 EATHER P DEG T DEG TY (MI D MID MID (8M) (8M)	WS TEMP	22 22 22 23 24 24 25 24 24 24 24 24 24 24 24 24 24 24 24 24	TEMP (C)	2.52 2.42 2.24 1.89 1.32 .66	.0791 .0791 .0665 .0413
TE 28/ EW POI ISIBIL 15281 -05 -05 H) -0	MO PEG) CM	315. 4. 302. 5. 294. 5. 301. 6. 0. 7.	WS (M/S)	5.28 5.28 5.85 7.20	1825 1012 1012 0561 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 0581 -
9:L0 9:L0 9:L0 8: 1 8-1: (	SIGE :	444 	S1GE : DEG1 :	6.4444 9.00-1-1-00-00-00-00-00-00-00-00-00-00-00-	
3.0 -12.3 20 1 TOT HI 7 -13 3(16M) 5 (16M)	SIGA (DEG)	15.8 15.8 15.8 12.8	SIGA DEG) (	4450800	100
MEATHER MP DEG C NT (MI)	TEMP (C)	11.84 1.91 1.91 1.91 1.91 1.91 1.91 1.91 1.9	TEMP (C) (	1.52 1 1.25 1 1.25 1 .92 1 .38 1 22 1	0747 0623 0069 0069
287 152 152 152 163 173 173 173	WS (M/S	5.8 8.5 8.8 8.8 B.5 DAT	WS P/S)	5.41 5.94 6.52 7.15 7.85 8.61	707
9 934 936	: WD				D
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (1/L)*10 USTAR	HEIGHT (M)	1. 2. 4. 8. 16. 32. 48. 16. 16. 16. 16. 16. 16. 16. 16. 16. 16	HEIGHT (M)	1.0 2.0 4.0 8.0 16.0 48.0	4.0 8.0 16.0 39.2*

	-								
	:	DATE 2	8/0	3/77	T	ME	15:0	00:00	:
	:			EATH					:
	:		TEM	P DE	GC		2.8		:
	:	DEN P	OIN	T DE	GC		13.9		:
	:	VISIB	ILI	TY (	(IM	20	)		:
CLD (TENTHS)	:1		MI		H	I	TO	TL 1	0:
CLD HT (M)	:	LOW 1	830	MID			HI		:
EXPONENTS	:	A=1	1 B	=	02	P=	.14		:
NET RADIATION	:				MI	H/CM	12		:
RICHARDSON NO.	:							35	
	:	The second secon							
(1/L)*10		(4M) -							
USTAR	:	(4M).3	487	(8M	1.3	461	(16)	11.347	2:
		wn.		s	TEM		IGA	SIGE	
SETCUT IN	:	WD (DEG)	(M/		(C)		DEGI	(DEG	
HEIGHT (M)	•	DEGI	(m/.	3 <i>1</i>			1661	(000	
1.	:				1.0	8			:
2.	:	287.	4.	00		97	18.3	3	:
4.	:	279.	4	25		54	16.2		:
8.	:	272.	4.	97		54	15.8		9:
16.	:	280.	5.			31	15.4	4 4.	8:
32.	:	283.	5.	74		80	13.3	3 5.	8:
48.	:		6.	06		17			:
LEAST SQUARE	S	FITTED	DA	TA					
				T.				SICE	
	:	WS		TE			GA	SIGE	
FEIGHT (M)	:	(M/S	,	(C	,	( ) !	EG)	(DEG)	:
1.0	:	3.6	4	.9	2	20.	0	5.7	:
2.0	:	4.0		.8	7	18.	.5	5.7	:
4.0	:	4.4	0	.7	8	17.	. 1	5.6	:
8.0	:	4.8	4	.6	1	15.	9	5.5	:
16.0	:	5.3	2	.3	3	14.	.7	5.5	:
32.0	:	5.8	4	0	3	13.	.7	5.4	:
48.0	:	6.1	8	1		13.	.1	5.4	:
	:	DU/DZ	D.	TH/D	2 1	3U* 1	100	RI	:
4.0	:	.1387		329		09	7	03	-:
8.0	:	.0762				27		17	:
16.0	:	.0419	-			55		51	:
39.2*	:					89		-1.74	:
J , . Z .									

-
T
20
_
11
VEN
-
~
DACED

	DATE 28/03/71		TIME 16:00:00	: 00:0	DATE	DATE 28/03/77		TIME 17:00:00	••	DATE	DATE 28/03/77	TIME	TIME 18:00:00	00:	
	*	~		•		WEATHER	ER		••		WEATHER	ER			
	TEM	P DEG C	3.2	•		TEMP DE	၁ ၅	2.2	•		TEMP DE	<b>၁</b> ၅	1.7		
	DEM POINT DEG C	T DEG C	-12.2	••	DEW	OINT DE	0 0	9111	••	DEW P	OINT DE	- 29	11.3		
	VISIBILITY (MI	TY (MI)	30		VISI	BILITY (	MI) 3	0	••	VISTE	ILITY (	MI) 3	0		
CLD (TENTHS) :LOM	OIM OI	_	HI TO	103	_	IH OM 10 MO	Ŧ	101	10:1	LOW 10	ON 10 MID HI	H	TOT	10:	
" (N) H	1830	MID	H	•		1830 MID		Ŧ	••	LOW	830 MID		Ħ		
••	A=09 B=07 P=	10 =	P= .14	•	A=	11 8=	-00 P=	.12	••	A=1	9 8=	14 P=	.21		
NET RADIATION :		Σ	MW/CM2	••		9.07	T MW/CM2	M2	••		-1.81	1 MW/C	H2		
•:	- (M8) -00+ (M4)	( 8M) -	•	11(16M)23 :		(M8)09 (M4)	1125	(16M)	125(16M)56 :	10. (M4)	.01 (8M)		.01(16M)	.02	
••	_	20	( OBSERVED	DATAI		95M1-1.06	96 (085	ERVED	DATA):		2M)1	1 (082	ERVED	DATA	••
* 10 *	(4M) 12	(8M)16	.16 (16M	:91 [		26 (8N	1135	(16M)	38:	( W )			(164)	.02:	
USTAR : (4	(4M) -3953	(8M).3	W91) 006	11.3905:		2208 (8M)	1).2188	(164)	.5130:	(H)	3390 (8N)		(16M)	.3441	
	MD WS	S TEMP		SIGE :	Ş		TEMP		SIGE :	QM		TEMP SIGA		SIGE	
HEIGHT (M) :(DEG)	Ξ	13) (5)	(DEC)	( DEG) : ( DEG )	(DEC)	(N/S)	(C) (DEC)		(DEG): (DEG)	10501	(N/S)	1 (2)		(DEC)	
1. :			.48				94.					.68			
2. : 26	263. 4.	4.77		••	264.	2.63	94.	13.6	••	322.	4.03	.73	10.2		
4. : 2			02 11.6	••	258.	2.56	•00	12.0	••	311.	4.58	.34	8.6		
••			.02 10.7		250.	3.01	.17	11.2	6.7:	302.	5.40	99.	8.1	4.5	
•			1.01 81	4.6:	260.	3.34	.02	9.5	.0.9	311.	111.9	.60	6.9	4.2:	
					262.	3.49	18	10.5	6.7:	310.	7.26	**	5.9	3.7	
8+		•		•			45		•			.22			
LEAST SQUARES FITTED DATA	TTED DA	T A				200									
: HEIGHT (M) :	WS (W/S)	TEMP (C)	SIGA (DEG)	SIGE :	WS (W/S)		TEMP S	SIGA (DEG) (	SIGE :	WS (M/S)		TEMP S	SIGA DEG) (	SIGE :	
1.0	4.17	.35	13.1	5.8 :	2.32		36 14	14.2	. 4.9	3.45	19. 6	1	11.6	6.0	

											-					1
HEIGHT (M)	: (M/S)		TEMP (C)	SIGA (DEG)	STGE (DEG)		WS (M/S)	TEMP	SIGA (DEG)	SIGE (DEG)		WS (M/S)	TEMP (C)	\$16A (DEG)	S1GE (DEG)	
1	.4		35	13.1	5.8	-	2.32		!	4.9		3.45		11.6	6.0	! "
	. 4.	. 09.4	.31	12.3	5.5	••	2.53	1 .33	13.1	4.9	••	4.00	19.	101	5.5	••
	. 5.		23	9.11	5.3	••	2.74			4.9	••	4.63		8.9	5.0	••
	: 5.		10	6.01	5.0	••	2.98			4.9	••	5.36		7.8	4.5	••
	. 9 :		61	10.3	4.8	••	3.24			6.9	••	6.21		6.8	4:1	••
	. 9 :		54	7.6	4.5	••	3.52			6.5	••	7.18		6.0	3.7	••
	. 7.		99	4.6	4.4	••	3.70			6.5	••	7.83		5.5	3.5	••
	0/00 :	DU/02 0TH/02		BU*100	۳. ا		20/00	DTH/DZ	80*100	RI		20/00	DTH/D2	80*100	12	
	: .162	6 029		.065	+00-		.0762	0143	109	04		.2269	.0084	.022	00.	
	680. :	5 024		.182	-:1	••	.0414	0122	314	13	••	.1314	.0067	.053	00.	••
	: .0493	3 0155		380	23	••	.0225	0080	695	56	••	.0760	.0033	.078	00.	••
	1.027	8004		-507	71	••	.0130	0050	-2.147	-8.99	••	.0355	7500	- 365	40	•

	••	DATE 28/	28/03/17	TIME	10:00:61		DATE 28/		11ME 20:00:00	00:0	: DATE	28/		TIME 21:	21:00:00
	••		WEATHER									3	MEATHER		
	••	TE	TEMP DEG C	0		••	TE	TEMP DEG (	1-0- 3		••	TEMP	DEG C	4.0-	
	••	DEW POI	POINT DEG C			••	DEM POINT		6-8- 3		. DEW	W POINT	T DEG C	-7.7	
	••	VISIBILITY	LITY (MI)	30		••	VISIBIL	BILITY (MI	1 20		: VI	VISIBILITY	TY (MI)	.,	
CLD (TENTHS)	:	OM 3 R		HI T	TOTL 10	:.	M 8 MO.	1	HI TOTL	11 10	HOT:	3 MID	1	HI T	TOTL 10
	••	1220		Ħ				1220 MID	2440 HI		. LOW		OIN	40 HI	
EXPONENTS	••		8	P= .22			A=25	0	P= .18		: A=		=32	P= .26	
NET RADIATION	 z		99	M/CM		••			MM/CM				-7.26	MW/CM2	
RICHARDSON NO.		0. (M)	.01 (8M)	.03(16M)			-	(8M)	.02(16M)	.03		_	( 8M)	.13(16M)	1 .22
	••	(39.192M)		W	DA	::	61	•	ш	OA	••	119	*0.	COBSERVED	DA
(1/1)*10			(8M)		_		_ `	.02 (8M)	.02	_ `					_
USTAR		(4M).3345	2	.3231 (104	3085	5:	74. (H4)		4587 (168	.4535	E + 1	10.1444	( BH)	1280 (16M)	M) .1198
	••	ON	WS TE	TEMP SIGA	SIGE		9	MS TE	MP SIGA	SIGE	OM .		WS TEMP	IP SIGA	S16E
HEIGHT (M)		_	-	-			-	M/S) (C)	( DEG	_	: ( DEG )	=	-	_	
1			1-	-1.88				1-	-1.37				-2.	40	
2.		278. 4	4-26 -1		8	••	355. 5		32 7.4		: 25		'	31	+
*	••		'	2.10 5.9	6	••		6-15 -1	-1.60 6.5		: 18.	2.09	09 -2.	53 7.3	3
.8	••		'		4.4 T.	••							•		
16.	••		.34	-1.76 4.		.6: 3		7	.36	3			•	91	3 3.5
32.	••	269. 7	7	<b>,</b> 18.	.4 3.		348. 9	7		3.2			'		
48.	••		-1-	.82		••		7	. 10		••		'	38	
LEAST SQUARES FITTED DATA	RES	FITTED C	DATA												
		S.A.	TEMP	SIGA	SIGE		N.S.	TEMP	SIGA	SIGE		MS	TEMP	SIGA	SIGE
PETGHT (M)	••	(M/S)	3	0	(DEG)	••	(M/S)	(3)	(DEG)	(000)		H/SI	3	(DEC)	(DEG)
1.0		3.35	-1.90	8.5	9.9		5.02	-1.41	9.1	7.9			-2.41	10.4	8.3
2.0	••	3.91	-1.89	7.4	5.8	••	11.5	-1.41		9.9	••		-2.39	8.8	6.7
4.0	••	4.57	-1.88	4.9		••	64.9	-1.40		5.5	••		-2.35	7.3	5.3
8.0	••	5.33	-1.85	2.6		••	7.37	1-1.39		9.4	••		-2.29	6.2	4.3
16.0	••	6.23	-1.80	4.9	3.8	••	8.38	-1.39	4.5	3.8			-2.20	5.2	3.4
32.0	••	7.27	-1.77	4.3	3.3	••	9.52	-1.48		3.2	••		-2.19	4.3	2.8
48.0	••	1.96	-1.83	3.9	3.0	••	10.26	-1.70	3.4	2.8			-2.39	3.9	5.4

\* \*

\* OBSERVED DATA

8888

.317

.0271

.1344 .0805 .0482 .0252

000-

.018 .046 .078

.0191 .0107 .0107 .0059

2774 2774 1576 0896

8888

.049

.0179 .0162 .0130

> .2366 .1381 .0806

8.0 16.0 39.2

BU\*100

**DTH/02** 

20/00

.

BU\*100

DTH/02

20/00

80\*100

PA
_
0
W
>
ER
w
S
08
0
*

.00 :	SIGE :		3.9: 2.5: 1.7:		SIGE :	3.0 :	5.8	5.6	1.3	RI :	. 00	. 00.		
00:00 -3.3 -8.9 0 TOT HI 4.26 (16M) (16M)	\$ 16A ( DEG )		3.6		SIGA DEG) (	1.3	20		- 10	BU*100			2.444	1
TOOK POOL	TEMP (C)		-3.18 -3.05 -2.90 -2.84		TEMP (C)	1.42	1.34	80.	2.84	DTH/DZ BU			.0250 2.	1
29/03/77 WEATH TEMP DE POINT DE 18 1L 1TY ( MID -25 B=7.2 -08 (8M 192M) .6 -40 (8M	WS (M/S)	1.75	3.64		WS M/S)	1.51 -3	' '		' '					1
DATE LOW LOW LOW (4M) (4M) (4M)	(DEG)	300.					20	m	n 4	20/00	.1294	.0774	.0463	
DTL 4:	SIGE :		2.0:		SIGE :	1.8	8.1	80	6.1	RI :	. 00.	. 00.	.00	
ME 23:0 -2.8 20 TD 40 HI -54 /CM2 29(16M) 85 ERVED 94 (16M)	P SIGA		.03 4.1 .48 2.9 .36 2.9		SIGA (DEG)	12.4	6.5		2.0	80*100	4.700	7.431	8.383	
7777 DEG DEG OFG NID NID (8M) (8M)	WS TEMP /S) (C)	4.6.6	.45 -2. .45 -2.		(C)	-4.06	-3.70	200	-2.62	DTH/DZ E	1193	2660	0000	!
TE 2	WD PEG) (M/		32.		WS (M/S)	.58	1.22	2.55	4.59	0 70/00	. 1537 .	. +1114	.0807	
**************************************	:													
22:00:00 0.9 7.6 TOTL 8 HI .03 2 2 16M)***** (16M)*****	5	-16	8 0 W		\$16E (DEG)				. 2.	2	00.	00.	000	
110 12-4	TEMP SIGA (C) (DEG)		-2.44 18.8 -2.41 37.6 -2.35 13.5 -2.43		\$ 16A (DEG)	72.7	39.9			BU*100	3	4	208.628	1 1
777 DEG DEG PEG NID NID (8M)*	WS TEM			DATA	TEMP (C.)	-3.24	-3.03	-2.42	-2.51	DT H/ DZ			.0367 2	
DATE 28/03  WE TEMP  DEW POINT  VISIBILIT  LOW  A=43 B=  (4M)*****  (4M)*****  (4M)*****  (4M)*****	( DEC ) ( )	241.	303. 283. 319.	FITTED DATA	WS (M/S)	44.	.42	040	.39	20/00	0029	-10014	0007	
				SQUARES							••	••		-
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (1/L)*10 USTAR	HEISHT (M)	1.5.4	8. 16. 32. 48.	LEAST SQUA	HEIGHT (M)	1.0	0.4	16.0	48.0		4.0	8.0	16.0	

. WEATHER	MEATHER TEMP DEG C -3.3
: DEW POINT	00
MOT :	TOTL HI
.37 : (4M) .3 DATA1: (39.192M) 1.53: (4M) 6.5	W/CM2 .16(16M) OBSERVED .69 (16M) 893 (16M)
SIGE: WD WS (DEG):(DEG) (M/S	SIGA
3.3: 350. 1.12 3.3: 327. 1.55 1.9: 331. 1.79	1 .0 .0 .4 1 .0 .0 .0
S1GE: MS (DEG): (M/S)	
1.00	
4I : DU/DZ DTH/DZ	
	1
0356	
.00 : .01430	

	1
4	;
-	-
A	1
0	
	-
0	1
w	1
>	!
a	1
w	
S	;
8	
80	1

	1 !	w 50 m
00.7 0.7 0.7 0.7 0.2	SIGE :	17.3 27.2 22.8 30.1
12:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00:00 : 17:00 : 17:00:00 : 17:00 : 17:00:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 : 17:00 :		21.8041
DATE 30/03/77 TIME 12:00:00  WEATHER  TEMP DEG C 6.7  DEW POINT DEG C -7.8  VISIBILITY (MI) 40  TOTL  LOW 1525 MID  A=27 B= .24 P= .05  50.24 MW/CM2  (4M)-2.92 (8M)-9.10(16M)-20.7  (4M)-7.69 (8M)-11.94 (16M)*****  (4M)-7.667 (8M).2825 (16M)****	SIGA (DEG)	33.
3/77 TIME L EATHER P DEG C 6 T DEG C -7 TY (MI) 40 D HI H MID HI H = .24 P= . 50.24 MW/CM2 (8M)-9.10(1 (8M)-9.10(1 (8M)-1).94 (	a .	52 178 178 178 178 178 178 178 178 178 178
77 TIME THER DEG C DEG C ( MI) 4 110 124 P= 24 P= 3.24 MW/C 1849-9.10 1849-11.94 1849.11.94	TEMP (C)	3.74 3.53 2.78 2.78 2.55 2.17
MEATHER WEATHER WEATHER DEW POINT DEG C VISIBILITY (MI) W 4 MID OM 1525 MID A= -27 B= .24 50.24 M (4M)-2.92 (8M)-9 (4M)-2.92 (8M)-1 (4M)-7.69 (8M)-1 (4M)-2.667 (8M)-1	55	248
30/03 WE TEMP POINT 181LIT 4 MID 152 S 192 M 192 M 192 M 192 M	WS (W/S)	2.20 2.12 2.36 2.38 2.44 2.54
DEW POINT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBILIT VISIBI		
DEW VISION A= (4M)	DEG	352
	SIGE: WD (DEG):(DEG)	
:00  4.6  3AT	SIG	22.5
C 4.6 C -6.8 ) 40 HI TOTL 4 HI HI P= .07 MW/CM2 6.70(16M)-14.6 (085ERVED DATA) 8.79 (16M).2248		2044.04
HI TO	S13A (DEG)	51.2 46.2 39.3 34.6 33.7
IM P= W/C W/C 08S 08S 071		2.68 2.47 1.93 1.89 1.59 1.36
HER (MI) (MI) (MI) (MI) (MI) (MI) (MI) (MI)	CC.P	22
	55	72 64 91 91
0/03 WEAP DINT ILITY MID MID S525 P 8 8 8 8 964	WS (W/S)	1.91
S S S S S S S S S S S S S S S S S S S		
DA 100 VI	SIGE: WD (DEG):(DEG)	358 353 355 135
00: 73 74 171	DEG	19.0: 22.3: 20.0: 21.2:
1ME 10:00:00 ::  4.3  -6.8  40  I TOTL 1:  HI  P= .10  W/CM2 .92(16M)-6.73 ::  085 ERVED DATA):  645 (16M)-4.42:	!!	040000
HI H	SIGA (DEG)	24.2 24.3 19.3 18.9 18.7
H 03.0.0		92 1 1 6 9 6 0 6 0 6 0 6 0 6 0 6 0 6 0 6 0 6 0
A C C T C C C C C C C C C C C C C C C C	TEMP (C)	4.11
DATE 30/03/77 T WEATHER WEATHER TEMP DEG C DEM POINT DEG C VISIBILITY (MI) DW 1525 MID H -04 1525 MID H 39.91 M 14M)97 (8M)-2 (4M)-2.60 (8M)-3 (4M)-2.60 (8M)-3		- ms mos
DATE 30/03/77 WEATH WEATH TEMP DE DEW POINT DE VISIBILITY (1) DM 1525 MID A=04 B= . 39.9 (4M)97 (8M (39.192M)************************************	MS (W/S)	1.57 1.53 1.75 1.83 2.00 2.05
SIB		
A=	. (DEG.)	23 33 33 33 33 33 33 33 33 33 33 33 33 3
	=	
IS)	3	
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO. (1/L)*10 USTAR	HEISHT (M)	1. 2. 4. 16. 48.
CLD (TENT CLD HT (M EXPONENTS NET RADIA RICHARDSO (1/L)*	154	
O X E	¥	

•	1
4	
ä	•
7	5
٠	-
C	2
u	u
۰	-
-	
	_
L	
-	_
	_
u	
ш	Ц
COLLABE	Ľ
4	ť
•	3
ē	ī
	ž
۳	4
۲	
U	7
4	τ
EAC	U

HEIGHT (M)		WS (W/S)	TEMP (C)	P SIGA (DEG)	SIGE (DEG)		(N/S)	TEN CO	SIGA (DEG)	S1GE (DEG)		(N/S)	TEN	P SIGA	S16E (DEG)
1.0		1.42		23.5	18.4		1.57	2.43	54.9	18.3		2.01		80.0	11.5
2.0	••	1.51	1.25	2	18.9	••	1.65	2.36	50.5	19.3	••	2.14	4 3.36	66.3	13.5
4.0	••	1.62		2	19.4	••	1.73	2.24	45.9	20.3	••	2.2		54.9	16.0
8.0	••	1.73		21.8	6.61	••	1.81	2.01	6.14	21.3	••	2.30		45.5	18.9
16.0	••	1.85		2	20.4	••	16.1	1.63	38.3	22.4	••	2.39		37.7	22.3
32.0		1.97		7	20.9	••	2.00	1.18	35.0	23.6	••	2.47		31.2	26.3
48.0	••	2.05	.12	50.4	21.2	••	2.06	1.17	33.2	24.3	••	2.5		28.0	29.0
		20/00	DTH/D2	BU*100	12		20/00	DTH/D2	80*100	<u>۳</u>		Z0/N0	DTH/DZ	BU*100	2
4.0			0348	762	22		.0281	0493	939	21		.0265	0577	663	08
8.0	••	1610.	0297	-2.280	-1.68	••	. 8410.	60400-	-2.833	-1.33	••	.0137	0483	-2.069	54
16.0	••		9610	-5.264 -	.10.29	••	. 0077	0243	-6.110	-5.31	••	.0071	0294	-4.700	-3.15
39.2*	••		6900	-9.253	.34.43		1800	- 0063	-B 205	-80.03	•	0075	0062	707 3-	22 23

	-	-				-										
		ATE 3	DATE 30/03/77 TI		ME 13:00:00	: 00:	DATE	DATE 30/03/77 TIME 14:00:00	TIME	14:00	: 00:	DATE	DATE 30/03/77		TIME 15:00:00	: 00:
			WEATHER					WEATHER	1ER		••		WEATHE	HER		•
			TEMP DE		7.8	••		TEMP DE	ى ئو د	4.6	••		TEMP D	EG C	8.9	••
		DEM P	DEM POINT DEG C		-7.8	••	DEM	POINT DE	2 9	-8.3	••	DEW	POINT D	EG C	4.6-	•
		VISIB	VISIBILITY (MI)		00	••	VISI	BILITY (	MI) 5	0	••	VIS	IBILITY	(INI)	0,	•
CLD (TENTHS)	100	3	OIM S	_	TOT		MO	7 MID	H	TOT	1:7	LOW	7 MID	Ħ	2 TOT	.6 7
CLO HT (M)		1 107	1525 MID		H		LOW	1525 MID		Ŧ	••	LOW	1525 MI	0	9 IH	: 560
EXPONENTS	¥	1 - =	2 8= .	22 P=	**80.	••	A= -	08 B= .	-d 12	01.	••	A= -	-8 60.	-16 P=	60.	••
NET RADIATION	••		48.5	7 MW/C	:M2	••		44.2	ST MA/C	M2	••		41.	31 MM/C	.M2	•
RICHARDSON NO.		- (M4	(4M) -1.72*(8M)4	143*	(16M)-	28.20 :	( M+)	44 (Bh	11-1-26	-(W91)	2.45 :	(4H)	23 (8	14)69	-(W91)6	1.45 :
	••	(39.192M)	12M) .0	0 (085	SERVED	DATA):	(39.1	92M) 0	00 (085	ERVED	DATA):	(39.	192M1 ***	** (083	SERVED	DATA!
(1/1)*10		(4M) 1.83*		18M)59*	(16M)	-18.5 :	-(M+)	1.20 (8)	4)-1-68	(164)	-1.62:	(14)	: (4M)65 (8M)92 (16M)96:	14)92	(16H)	96:
USTAR		(4M) .2299*		1.1887	(8M), 1887* (16M), 3110:	:3110:	( 4M)	): (4M).2179 (8M).2216 (16M).2203: (	1).2216	(164)	.2203:	(##)	(4M).4469 (8M).4454 (16M).4418	IM) . 4454	(16M)	.4418:
		3	!	1		SIGE :	Q.	S.M.	TEMP	SIGA	SIGE :	Ş	MS		SIGA	SIGE :
HEIGHT (M)	: 10	_	(N/S)	(3)	(DEG)	(DEC): (DEC)	(DEG)	(M/S)	(C) (DEG) (DEG):(DEG)	DEG)	(DEG):	(DEC)	(N/S)		(0) (0)	(DEG):
1.				4.81					5.55					7.04		
2.		47.	2.16	4.64	8.64	••	320.	2.26	5.26	6.64	••	7.	4.92	6.55	10.7	
+.		.04	2.14	3.85	48.7	••	318.	2.29	4.62	46.8	•	3.	4.96	5.50	10.3	••
.8		337.	2.47	3.80	619	17.8:	310.	2.68	4.71	44.8	16.3:	354.	5.89	5.58	4.6	7.03
.91		53.	2.56	3.55	46.6	21.6:	316.	16.2	4.63	40.2	17.9:	359.	81.9	5.31	8.6	7.4:
32.		2.	2.42	3.26	42.1	24.4:	320.	3.04	4.31	38.4	20.03	359.	6.33	16.4	8.3	8.5:
48.		3.	2.45	3.05	31.6	26.7:	321.	2.93	4.15	40.5	24.3:	359.	6.32	4.60	8.4	9.4:

	••	MS	TEM		SIGE	••	SE	TEN		SIGE	••	MS	TEMP	SIGA	SIGE
HEISHT (M)	••	(M/S)	(3)	(DEG)	(DEG)	••	(M/S)	3	(DEG)	(DEG)	••	(N/S)	5	(DEC)	(DEG)
1.0		2.12			11.4		2.10	5.21	52.1	10.4		4.62		11.3	4.9
2.0	••	2.19	4.43	54.3	13.3	••	2.25	5.16	49.3	11.9	••	4.92		10.7	5.5
4.0	••	2.26		-	15.5	••	2.42	5.05	46.7	13.8	••	5.24		10.0	1.9
8.0		2.33			181	••	2.59	4.86	44.3	15.9	••	5.58		9.5	6.9
16.0	••	2.40			21.1	••	2.77	4.55	41.9	18.3	••	5.94		8.9	7.7
32.0	••	2.47			24.6	••	2.97	4.20	39.7	21.2	••	6.33		8.4	8.6
48.0		2.52		•	56.9		3.09	4.20	38.5	23.0	••	95.9	11.4	8.1	9.5
		20/00	DTH/DZ	BU*100	1.	-	20/00	DTH/D2	80*100	A.		20/00	DTH/D2	BU*100	-
4.0		.0230	0617	•	08		.0557	0389	376	-11		1096	0801	164	05
8.0	••	.0118	.01180510		26	••	.0298	0319	-1.074	63	••	.0583	0666	481	+11-
16.0		- 1900-	0296	-4-	-3.14	••	0910.	0178	-2.088	-3.10	••	.0310	0396	-1.011	99
39.5*		. 0000	0050	-4-	00.	••	6900	0000	000	00	••	0006	+6000	-1.269	76

	••	MS	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	
HEIGHT (M)	••	(M/S)	(3)	(DEG)	(DEG)		(M/S)	(3)	(DEG)	(DEG)		(M/S)	3	(DEG)	
1.0		4.67		13.0	4.5		46.4		11.3	3.6		4.02	5.45	19.1	
2.0	••	5.05		11.8	6.4		5.43		10.2	3.9	••	4.46	5.45	18.5	
4.0	••	5.45	Ű.	10.8	5.3		5.96		9.5	4.2		46.4	5.44	18.0	
8.0	••	5.90		8.6	5.7		6.54		8.3	4.6		5.47	5.45	17.4	
16.0	••	6.38		8.9	6.2		7.18		7.5	6.4		90.9	5.38	16.9	
32.0	••	68.9	16.4	8.1	6.8		7.88	5.29	6.9	5.3		6.72	5.25	16.4	
48.0		7.22		7.7	1.1		8.32		4.9	5.5		7.14	2.06	1.91	
	"	00/02 DTH/02	DTH/DZ	80*100	8.1		20/00	DTH/02	BU*100	RI		20/00	0TH/02	BU*100	
4.0		.1451	0671	127	06		.1855	0363	057	+0		.1695	.0063	.015	
8.0	••	.0768	0557	359	17		.1018	0306	161	10	••	.0939	.0052	.039	
16.0	••	.0415	0328	726	19		.0559	+610	338	22		.0520	.0029	.070	
39.2*	**	000600075	0075	846	31		****	6900	586	23	••	- 7800.	0019	220	

....

									,							
3.4	16.3	2.06	98.9	19.	2.6:		5.13	8.00	2.	:6.9		4.86	6.92	3.		48.
3.4	16.2	5.25	6.72	18.	5.4:		2.40	7.93	3.	7.4:		5.14	6.93	. 2.		32.
3.9	16.7	5.44	6.33	18.	4.7:	8.0	5.13	7.42	3.	5.6:	8.9	5.47	6.63		•	16.
4.4	17.8	2.48	5.79	-:-	4.7:		5.93	6.92	357.	9.0:		5.72	6.23	354.		8
	17.8	2.07	4.66	19.	••		5.68	5.64	2.	••		5.67	5.17	. 2.	•	4.
	18.6	2.60	4.45	22.	••		6.45	5.45	6	••		6.58	5.03	. 9		2.
		5.56			•		6.60			••		6.92				
(DEG)		(C) (DEG)	(H/S)	0EG)	(DEG):(DEG)	(DEG)	(C) (DEG)	(N/S)	(DEG)	(DEG) (DEG):(DEG)	DEG	(3)	(M/S)	( DEC )	(W)	HEIGHT (M) :(DEG)
SIGE		TEMP	SM	QM	SIGE :	SIGA	TEMP	S.M.	Q.	SIGE :	SIGA		WS	MD		
.3205	(16M)	1.3404	7: (4M).3617 (8M).3404 (16M).3205	(4H)	.4557:	( 16M)	M1.456	(4M).4447 (8M).4409 (16M).4384: (4M).4646 (8M).4567 (16M).4557:	(4M).	.4384:	( 16M)	M) .440	4447 (8)	( tH) :		USTAR
•00	(16M)	1 .03	.02 (8M	(4H)	15:	(W91) S	1 - CH	11 (8	( W )	45:	(16M)	4 (M	34 (8	(4H)	01	(1/1) *10
DATA	ERVED C	6 (085	2M)8	(39.19	DATA):	SERVED	** (08	92M1***	(39.1	DATA):	SERVED	** (08	92M)***			
+0.	( 16M)	1 .02	.01 (8P	( M )	22 :	(M91)0	M1	04 (8	( W+)	: 19	3(16M)	M)3	12 (8		N NO.	RICHARDSON NO.:
	M2	3 MM/C	-3.6		•	CM2	1 MM /0	9.		••	:M2	42 MW/	21.		TION	T RADIA
	•15	15 P=	14 B=	A=0	••	.13	-11 P=	14 8=	A=	••	=:	.12 P=	14 B=	. A=		EXPONENTS
	H	2440	MID	LOW	: 029	HI 7	0	1980 MI	LOW	: 560	HI 6	0	1525 MI	10M		D HT CM
6	TOT	HI 6	MID	. MO	7:8 7	2 TOT	Ŧ	J MID	LOW	1.6	3 TOT	H	6 MID	FOM:		CLD (TENTHS)
	0	9 (IN	ILITY (	VISTB	••	09	CIW	BILITY	VISI	••	09	(MI)	BILITY	ISIA :		
	-8.3	ပ ၁	DINT DE	DEW P		-8.3	EG C	POINT D	DEW	•	11:1	. 2 93	POINT D	DEM		
	8.3	၁ ၅	TEMP DE			8.9	EG C	TEMP D		••	4.6	2 9 9 9 EG	TEMP D			
		ER	WEATHE				HER	WEAT		••		HER	MEAT			
00:	11ME 18:00:00		: DATE 30/03/11	DATE 3	: 00:	E 17:00	TIMIL 1	: DATE 30/03/77 TIME 17:00:00	DATE	: 00:	ME 16:00:00	WIL L	: DATE 30/03/77 TI	DATE		

CBSERVED DATA

**	••	••	**	**	5:	**	••	**	**	-	3:	2:		:	! "	••	••		*	5:	
00:					٠,	7620			•16	DATA	.3	.211	SIGE	(DEC):				4.	3.4	2.	
DATE 30/03/77 TIME 21:00:00		6.3	-8.9		3 TOTL		32	2	16M)	SVED	(H91)	(4M).2168 (8M).2129 (16M).2112:				8.0	7:1	5.9	4.6	3.2	
IME			7	25	6:LOW MID 2 HI 3	2440 HI	P= .	W/CM	1160.	DBSEA	.26	129	SIS	(C) (DEG)	13	33	90	99	16	23	
7 T	HER	EG C	EG C	CHI	2 H	2 0	.45	37 M	=	12 ((	E	M) . 2 ]	TEM	5	2.	2.33	2.1	2.1	2.	3.	
03/7	WEAT	MP D	NT D	ITY	10	I	B= -	-8-	4 (8		6 (8	8 (8	NS N	(M/S)		.78	2.98	66.	.12	14.	-
30/		TE	I POI	11815	I		.35		0.	1924	1.	.216									
DATE			DEN	VIS	MOT	LOW	A= -		( 4 H )	(39.	(4M)	4 T	9	(DEG)		53.	50.	44	50.	50.	
. 0	••	••	**	••	9	. 0	••	••	21 :	TA):	. 54:	741:	3E :	EG1 :	-	••	••	3.3:	3.2:	2.3:	
0:00					OTL	7620			•	D DA	Î	H) .1	SIC	0		9	80				
: DATE 30/03/77 TIME 20:00:00		4.7	-7.9	0	2 TOTL	H	.28	M2	116M	ERVE	91)	: (4M).2004 (8M).1842 (16M).1741:	SIGA	(C) (DEG) (DEG):(DEG)		•	5.8	5.	5.	3.	
TIME		J	J	1 3	Ħ	MID 2440 HI	- b=	MW/C	.12	(088	14.	1842	ď	-	3.00	111	5.89	1.47	.73	.83	
111	ATHER	DEG	DEG	IW)	4	01	24	3.37	(8M)	. 20	(8M)	( NB )	!								
0/03/	ME	TEMP	TNIO	ILIT	D:LOW MID 4 HI	•	A=19 B=24 P= .28	ĩ	.05	2M1	.23	700	N.	(N/S)		2.6	2.86	3.8	4.66	5.6	
TE 3			EW P	ISIB		*	-		E	61.6	E	M) . 2					26.	. 8	2.	1.	
. DA	••		•	>	MO7:C	••	••		. (4	: (3	5) ::	.: (4		: ( DE		. 3	. 2				
					7	950			.12	DATA	.23	.2548	SIGE	(DEG): (DEG)				*	3.2:	3.1	
ME 19:00:00		٠.	.2		TOT	40 HI 7620	20		6MI	BSERVED DATA):	164)	789 (16M), 2548:	SIGA			1.1	1.9	5.3	5.3	5.3	
ME 1		9	-7.2	09	3	H 041	. "	1/CM2	1 ) 90	BSER	16 (	1 68	!	(DEG)	1	1	1	4	7	3	
11 2	HER		S	CIW	7 H	7 24	15 ₽	-6.56 MM		05 (0	-	1).27	TEMP	3	4.	4.4	4.0	4.5	4.6	4.5	
03/7	MEATHER	TEMP DEG C	DEW POINT DEG	VISIBILITY (MI)	MID	MID	A=07 B=15 P	-6.	(4M) .03 (M)	(39.192M) .05 (O)	9 (8	14M) ,2969 (8M) .27	S.M.	(N/S)		3.82	4.02	81.	.89	.56	
30/		TE	104	181	I		100.		0.	192M	0.	,296				3	4	2	2	9	
: DATE 30/03/77 TI			DE	VIS	*O7:	FO7 :	A= -		M4)	(39,	M4)	( 4 H	9	: ( DEG )		18.	15.	7.	14.	15.	
••	••	••	••	••			••	. NO	ON	••	••				"	••	••	••	••	••	
					NTHS	(M)	TS	IATI	SON		(1/1)*10	æ		E =	:	2.	. *	.8	.9	32.	
					CLC (TENTHS)	CLO HT (M)	EXFONENTS	NET RACIATION	RICHARDSON NO.:		1/1	USTAR		HEIGHT (M)					1	3	
					CLC	CLC	EXF	NET	RIC												

		••	**	••	**	**	0.0			••	••	**
\$16E	12.1	8.9	6.5	4.7	3.5	5.5	2.1	2	00.	00.	00.	00.
SIGA (DEG)	11.2	8.8	6.9	5.4	4.2	3.3	5.9	BU*100	.366	.812	1:451	1.382
TEMP (C)	2.14	2.20	2.32	2.55	2.91	3.30	3.24	DTH/D2	.0675	.0588	.0413	6110.
WS (W/S)	2.07	2.59	3.24	4.06	5.08	6.37	1.26	Z0/00	.2452	.1535	1960.	0090
		••	••	••	••	••				••	••	••
SIGE (DEG)	5.7	4.8	4.1	3.4	5.9	5.4	2.2	RI	00.	00.	00.	00.
SIGA (DEG)	7.8	8.9	5.9	5.2	4.5	4.0	3.7	BU*100	.358	.824	1.467	.993
TEMP (C)	3.00	3.05	3.16	3.35	3.65	3.92	3.74	DTH/DZ	9650.	0150.	.0337	.0062
WS (W/S)	2.07	2.52	3.08	3.75	4.50	5.56	6.23	70/00	.2034	.1239	.0754	.0331
		••	••	••	••	••	••			••	••	
SIGE (DEG)	5.3	4.8	4.3	3.9	3.5	3.2	3.0	R I	00.	00.	00.	00.
SIGA (DEG)	6.9	6.5	6.2	5.9	2.6	5.3	5.5	BU*100	.088	.224	.424	• 075
TEMP (C)	4.32	4.34	4.38	4.45	4.55	4.58	4.37	DTH/D2	.0289	.0243	.0152	90000
WS (W/S)	3.27	3.75	4.31	4.96	5.69	6.54	7.10	20/00	.2005	.1152	.0662	.0212
		••	••	••	••	••	••			••	••	
HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0		4.0	8.0	16.0	39.5*

\* OBSERVED DATA

	•	•	1
	۱		
	•		1
	ĺ		
	•	-	2
	ι	ı	Ц
		3	
	Į		4
	(		
	(		4

			JET -	E 22:00:00		DAIE	DAIE 30/03///		11ME 23:00:00	00:	DAIL	UATE 31/05/11		11 ME 00:00:00	00:
		MEATHER	HER		••		: WEATHER	ER		•		WEATHE	THER		
		TEMP D	EG C	3.9	•		TEMP DE	2 9	3.6	••		TEMP	DEG C	2.5	
	. DEW	DEW POINT DEG C	EG C	-8.9	••	DEW	POINT DE	2 9	-8.6	••	DEW	POINT	DEG C	-8.6	
	: VIS	VISIBILITY (MI	(MI)	25	••	VIS	IBILITY (	MI) 2	2	••	VIS	IBILITY	(IH)		
CLD (TENTHS)	HO7:	MID	Ŧ	8 TOT	-	LOW	MID	Ħ	8 TOTL	80	LOW	IH OIM WO.	H	9 TOTL	6 7
CLD HT (M)	* LOM	MID	0	HI 7620		LOW	MID		=	20	LOW	: LOW MID	01	Ħ	7620
EXPONENTS	: A= -	A=05 B=	.54 P=	.12		A=	.02 B= .61 P=	=d 19	90		A= -	.08 B=	-10 P=	.26	
NET RADIATION	••	-4-	-4.33 MW/	CM2	••		-5.7	9 MW/C	M2	•		-3	.63 MW/	CM2	
RICHARDSON NO.		.53 (8	M) 1.5	0(16M)	3.06 :		.39*(BM	11.44	1 (16M) 7	3.73 :	(4H)	(4M) .27 (8M) .72(16M) 1.75	7. (M8	2(16M)	1.75
		192M1	12 (08	SERVED	DATA):		192M1 .8	0 (085	ERVED	DATAL	(39.	192M1 9	80) 94.	SERVED	DATA
(1/1)*10	( H+) :	11.81 (8	M) 43.9	( 16M)	89.58:		6.65*(8M	3.04	1*(16M)	*****	(4H)	3.50 (	8M) 10.5	M91) L	29.89
USTAR	: (4M)	(4M).0451 (8M).0221 (16M).0129:	M) .022	1 (16M)	.0129:		(4M).065* (8M).032* (16M).0007:	11.0324	(H91)	: 0000	(4H)	1 6790.	BM) .041	W91) 6	.0252
	QM :	SM	TEMP		SIGE :	3	S.M.	TEMP	!	S16E :	9	N.S.	TEMP	SIGA	SIGE
HEIGHT (M)	: ( DEC )	(M/S)	3	(DEG)	(DEG):(DEG)	(090)	(N/S)	(C) (DEC)		(DEG): (DEG)	(DEG)	(N/S)	(C) (DEG)	(DEG)	(DEG):
1.			3.01					15		·			.45		
2.	. 19.	1.54	3.17	1.94	••	229.	1.79	31	15.8	••	272.	1.37	.59		
4.	: 15.	1.54	2.80		••	227.	1.96	29	14.8	••		1.37			
8.	: 7.	18"1	3.25	41.0	11.0:	224.	2.48	64.	12.3	3.0:	270.	2.08		6.8	3.2
16.	. 18.	16.1	3.29		14.8:	230.	2.68	1.33	10.2	3.3:		2.77			2.3
32.	. 07 :	2.01	3.20		37.3:	218.	2.25	1.94	14.6	7.1:		2.87			2.5
•	. 30	2 2 2	2 02		22 20	202	1 07	1 80	10 4	.0		2.68			4.0

LEAST SQUARES FITTED DATA

	••	SM	TEMP	SIGA	SIGE	••	SM	TEMP	SIGA	SIGE	••	NS	TENS	P SIGA	SIGE	
HEIGHT (M)		(M/S)			(DEG)	••	(M/S)	(3)	(DEG)	(DEG)	••	(M/S)	(3)	-	(DEG)	
1.0		1.38		47.2	3.7		1.93	54	13.6	.7		1.12	.38	8.0	2.2	
2.0	••	1.50	3.03	45.7	5.4	••	2.00	39	13.8	1:1	••	1.34	.45	7.5	2.3	
4.0	••	1.62		44.3	7.8	••	2.06	11	13.9	1.8	••	19.1	.58	7.2	2.5	
8.0	••	1.76		42.8	11.4	••	2.14	04.	14.1	2.7	••	1.93	.83	8.9	2.7	
16.0	••	16.1		41.5	16.5	••	2.21	1.22	14.2	4.1	••	2.32	1.29	4.9	5.9	
32.0	••	2.01		40.1	24.1	••	2.28	2.06	14.4	6.3	••	2.78	2.05	1.9	3.1	36
48.0	••	2.17		39.4	30.0	••	2.33	1.85	14.5	8.1	••	3.09	2.60	5.9	3.2	
		20/00	DTH/02	80*100	Z.		20/00	0TH/02	80*100	R.I		20/00	DTH/D2	BU*100	RI	•
4.0		.0441		.626	00.		.0232	.1416	1.907	00.		.0981	.0736	1.625	00.	•
8.0	••	.0239	.0242	1.772	00.	••	.0120	.1209	6.078	00.	••	.0588	*690*	4.257	00.	
16.0	••	.0130		3.617	00.	••	.0062	.0795	14.896	00.	••	.0352	0190	10.384	00.	
39.5*	••	.0137	1	766	-1.60	••	0175	6900.	8.338	.00	••	6110	.0375	26.424	.00	

OBSERVED DATA	ATA													•		
	"	DATE	DATE 31/03/77	-	E 01:00:00	: 00:0	DATE 3	31/03/17	1	TIME 02:00:00		: DATE	: DATE 31/03/77		TIME 03:00:00	: 00:0
	••		MEATHER			•		WEATHER	HER			••	MEA	WEATHER		••
	••		TEMP DEG C		3.4	••		TEMP DEG	EG C	3.4			TEMP DEG	DEG C	0.0	••
	••	DEW	O INICA		-8.3	•	DEW P	DINT D	EG C .	-7.8		. DEW	POINT	DEG C	-8.3	••
	••	VISI	VISIBILITY (MI	_	20	•	VISIB	VISIBILITY (MI	_	20		: VIS	VISIBILITY (MI	CHI	50	••
CLD (TENTHS)		*CO#	OIW	F	8 TOTL		LOW	MID	Ħ	6 TOTL	9	*COM	MID	IH 9	Mar. 34	rott 6:
CLD HT (M)	••	10m	MID	0	IH	: 5019	LOW	OIM	0	Ŧ	6705	MOT :	I	MID 4570	70 HI	••
EXPONENTS	••	A= .	-12 8=	-d 09.	.12	••	A=05	8=	-76 P=	12		: A= -	•16 B=	4 L b	61. =	••
NET RADIATION	 Z		-5-	-5.44 MW/	CM2			-WSG-	G- MW/CM2	SM2		••	7	SG- MM	W/CM2	••
RICHARDSON NO.:	0	(4M)		(8M) 3.4	6 ( 16M)	7.09 :	(4M)13.9	~ -	(8M)53.53(16)	3.53(16M)	****	: (4M)	2.06	18H) 5.	5.14(16M)	8.76 :
(1/1)*10	• ••	(4M) 59.72	_	**	*		*****(W*)					: (4M)	****		** (16M	-
USTAR	••	(4M).0291	-	2	8	.00713	(4M) .0000		(8M).0000 (16M).0000:	W91) C	00000	(4M)	~	8M) .0048	-	.0033
	"	Q	SH	TEMP	SIGA	SIGE :	Ģ	SI	TEMP	SIGA	SIGE	OM :	MS	TEMP	SIGA	SIGE :
HEIGHT (M)		: ( DEC )	(M/S)	3	(DEC)	(DEC):(DEC)		(N/S)	3	( DEC )	(DEG)	(DEG): (DEG)	(N/S)	55	(DEC)	(DEG):
1.				.07					-2.58					-1.12	2	
2.	••	.19	1.78	.33		••	344.	.76	-1.90	23.6		. 310.	.83			•
*	••	62.	1.88	44.	11.4	••	319.	1.13	04	14.9		: 299.	.98			••
.8	••	.19	2.18	1.19	12.0	1.8:	310.	.93	.78	18.7		: 291.	1.29		3 16.2	
16.	••	79.	2.20	1.51	17.6	3.7:	300.	19.	1.00	23.2			1.29	19.		5.7:
32.	••	95.	2.34	1.64	18.2	4.8:	237.	.52	1.09	15.4	4.63		1.41			
48.	••	102.	2.75	1.56		5.3:	202.	.80	1.04	17.4			1.62			
LEAST SQUARES FITTED DATA	RES	FITTE	D DATA													
	"	S#		a		\$16E:	S.H.			SIGA	SIGE			TEMP	SIGA	\$16E :
HE IGHT (M)	••	(M/S)		3	) (930	(DEG) :	(M/S)		3 3		(DEC)	¥	(M/S)	3	(DEC)	: (930)
	-															

SIGE : 0EG1 :	. 5	2.0 :	. 8.	. 6.	. 5 .	. 9.	. 2.	-	. 00	: 00	: 00.	
0 0	-	2	7	~	2	1	6	a I		•	•	
\$16A (DEG)	22.5	20.1	18.0	1.91	14.4	12.9	12.0	BU*100	6.667	16.666	28.391	, ,
TEMP (C)	75	63	04	00.	19.	1.02	•38	DTH/D2	.1149	.0942	.0526	01.00
WS (W/S)	.76	.87	1.00	1.14	1.30	1.49	19.1	ZQ/NQ	.0448	.0256	.0147	
		••	••	••	••	••	••			••	••	
SIGE (DEG)	.3	9.	6.	1.6	2.7	4.5	1.9	I.	8	00.	00.	00
\$16A (DEG)	21.0	20.3	9.61	18.8	18.2	17.5	17.1	80*100	16.423	65.639	162.538	177 00
TENP (C)	-1.63	-1.40	97	19	66.	1.85	.74	DTH/D2	.2113	.1726	1 1560.	0000
(N/S)	1.01	.93	.86	.79	.73	19.	+9.	20/00	0233	9010	0050	20.00
		••	••	••	••	••	••			••	••	
\$16E (DEG)	9.	6.	1.3	2.0	3.1	4.6	5.9	8.1	00.	00.	00.	00
\$16A (DEG)	10.7	11.6	12.6	13.6	14.7	16.0	16.7	BU*100	1.578	4.446	960.6	000 7
TEMP (C.)	.23	.33	.53	.88	1.42	1.87	1.47	DTH/02	.1013	.0847	.0514	0000
(N/S)	1.62	1.76	1.92	5.09	2.27	2.47	2.60	20/00	.0543	.0296	1910.	0254
		••	••		••	••			-		••	
HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0		4.0	8.0	16.0	20 24

Ĺ			
ŀ			
:			
(	-	,	
0			
i		-	
1	4	Ļ	
۹	•	4	

	-		-												
	. DAIE	DAIE 31/03/1/ 11ME 04:00:00	E	E 04:00	: 00:	DAIE	DAIE 31/03/11		11ME 05:00:00		DAIE	: DAIE 31/03/11		11 ME 00:00:00	00:1
		MEA	WEATHER		••		WEATHER	. K		••		WEATHER	THER		
		TEMP DEG C		-1.1	••		TEMP DE		2.5	••		TEMP	DEG C	-2.8	
	: DEM	DEM POINT DEG C		-8.9		DEM	POINT DE		-8.9	••	DEW	POINT DEG	DEG C	-9.5	
	: VIS	VISIBILITY (MI)		20		VISI	BILITY (!			••	VISI	VISIBILITY (MI	CHI	25	
(TENTHS)	*COM	MID	-	TOTL		MO	7:LOW MID 7 HI	JH Z	TOT	1: 7:	LOW	4 MID	Ħ	TOTL	[L 4:
CLO HT (M)	. LOM	I	=	IH 0	••	LOW	MID	4570	H	••	LOW	1525 MID	01	Ħ	•
EXPONENTS	: A= -	A=27 8=25 P=	25 P=	.25	••	A=25	25 B=	21 P=	.31	••	A= -	29 B=	.00 P	26	
NET RADIATION		9-	M	CM2	••		-7.26	S MW/CM2	12	••		-1	.95 MW/CM2	CM2	
RICHARDSCN NO.: (4M) .13 (8M)	( M+) :	.13 (1	•	10(16M)	. 55 .	( M+)	.05 (8M)		.12(16M)	. 72.	(4H)	.12 (	(8M)	.29(16M)	64.
	: (39.	192M) 1.	.30 (08.	SERVED	DATA):			(100)		DATA):		(39.192M) 7	10) 91.	SERVED	DATA)
(1/1)*10	(H+) :	1) 06.	8M) 2.0	(16M)	3.18:	( 4M)	.23 (8M	94.	(16M)	. 84:	-		18M) 1.6	1.89 (16M)	2.52
USTAR	( H+) :	(4M).1936 (8M).1546 (16M).1271:	8M) .154	6 (16M)	.1271:	(M4)	.2016 (8M),1887 (16M)	1887	(164)	.1655:		(4M).1845 (	(8M).147	.1476 (16M).	.1280:
	9	SH	TEMP	SIGA	SIGE:	Q.	SM			SIGE :	QN	XX.		SIGA	SIGE
HEIGHT (M)	**	(M/S)	3		(DEG) : (DEG)	(DEG)	(N/S)	0) (3)	(DEC)	(DEG) : (DEG)	(DEC)	(H/S)		(C) (DEG)	(DEG):
1.			-2.71					-1.56					-1.7	_	
2.	: 192.		-2.43	7.9	••	241.		-1.45	12.0	••	264.	2.83	14.1-		
4.	: 189.		'		••	238.		-1.63	11.7	••	263.	3.07			
8.	: 187.	4.65	-1.52		2.5:	231.	4.01	66	8.7	3.2:	257.	4.39		7.4	3.4
16.	: 193.		55		1.4:	231.	4.83	59	6.9	2.3:		5.41	.42		2.3:
32.	: 194.				1.3:	225.	00.9	19	0.9	2.4:		5.93			5.9
48.	195		00	4.3	1.7:	227	4.54	. 33	6.5	2.1:		10.9			2.2

LEAST SQUARES FITTED DATA

S1GE :	2.9 :	2.9 :	2.9 :	2.9 :	2.9 :	2.9 :	2.9 :	RI :		: 00.		000
SIGA (DEG)	13.0	9.01	8.7	7.1	5.8	4.7	4.2	BU*100		.740	0740	1.719
TENP (C)	-1.60	-1.45	-1.16	62	.21	16.	• 50	OTH/02	-	.1480	.1480	.1480
HS)	2.36	2.83	3.39	4.08	4.89	5.88	6.54	DU/DZ		.2080	.2080	.1249
		••	••	••	••	••	••					
SIGE (DEG)	4.6	4.0	3.5	3.0	5.6	2.3	2.1	1.2	-	00.	88	888
SIGA (DEG)	15.1	12.7	10.7	0.6	7.6	4.9	5.8	BU*100	-	.435	.435	1.040
TEMP (C.)	-1.58	-1.51	-1.38	-1.14	70	06	•29	DTH/DZ		.0724	.0724	.0724
MS (W/S)	2.01	2.50	3.10	3.84	4.76	5.90	6.70	20/00		.2237	.1387	.1387
					••	••						
(DEG)	3.5	3.0	2.5	2.1	1.8	1.5	1.4	۳ ا		00.	88	000
SIGA (DEG)	9.8	8.1	6.9	5.6	4.7	3.9	3.5	BU*100		869.	9699	1.670
TEMP (C)	-2.68	-2.52	-2.20	-1.62	68	.29	•05	0TH/02		.1600	.1600	.1364
WS (W/S)	2.56	3.05	3.64	4.34	5.18	6.18	6.85	20/00		.2149	.1281	.1281
		••	••	••	••	••			-	••		
HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0			0.4	0.0	0.8

OBSERVED CATA	ITA															
		DATE	DATE 31/03/77 TI	77 TI	ME 07:00:00	: 00:0	DATE	DATE 31/03/77 WEATHER	1 0	TIME 08:00:00		: DATE	31/	03/77 TIME WEATHER	00:00:60	: 00:
	•••		TEMP DEG	DEG C	-2.2	••		TEMP DEG	EG C	0.0	••		TEMP	DEG C	3.2	
	••	DEW	DEW POINT DEG	DEG C	-7.8	•	DEM	0	2 93 c	1.9-	••	DEW	POINT	DEG C	4.4-	
	••	VISI	VISIBILITY (MI)	(HI)	30	••	VIS	VISIBILITY (MI)	(MI)	01	••	VIS	SIBILITY (MI	CIN	00	•
CLD (TENTHS)	::	.LOW	2 MID	2 HI	TOTL	TL 4:	LOW	2 MID	2 HI	101	.4 4:	LOW	I MIO	H	TOTL	1:
CLD HT (M)	••	MOT :	1830 MID 2440 HI	10 244	1H 0+	•	FOM:	1830 MI	1830 MID 2440	IH C	••	LOW	1830 MID	01	Ŧ	••
EXPCNENTS	••	•	.82 B= 1.27 P	1.27 P.	=21	•	- = W	A=11 B=	-06 P=	.07	•	A= -	.12 8=	.13 P=	.10	•
NET RACIATION			-2.	-2.16 MW	W/CM2	••		12.	12.70 MW/CM2	M2	•		27	27.56 NW/CM2	:M2	
RICHARDSON NO.	::	( H+)	.41*(8	3M) 1.	76(16M)	6.20	(4M)	(4M)43 (8M)-1.31(16M)-2.81	M)-1.31	(16M)-	. 18.2.	( W +)	1 000-1-	14M)-1.00 (8M)-2.93(16M)-6.28	-(M91)	. 82.9
	••	(39.1	92M1	39 (01	BSERVED	DATA)	(39.	(39.192M)-9.38 (OBSERVED DATA)	38 (083	ERVED	DATA):		192M1-1	.94 (08:	SERVED	DATA):
(1/1)*10	••	(4W)	7.21*(8	3M160.	(4M) 7.21*(8M)60.15 (16M)****	*****	(4M)	(4M)-1.18 (8M)-1.74 (16M)-1.85:	1M)-1-74	(16M)	-1.85:		-2.67 (	[4M]-2.67 (8M)-3.86 (16M)-4.12	(16M)	-4.12:
USTAR	••	(4M).	055* (8	3M) . 01	[4M].055* (8M).0170 (16M).0047:	1.0047		(4M).2823 (8M).2827 (16M).2787	IM) . 282	(16M)	.2787:	_	1 5691.	4M).1695 (8M).1766 (16M).1790	(16M)	.1790:
		ş	MS	TEMP	SIGA	SIGE : WD	Q.	N.S.	TEMP	SIGA	SIGE :	3	MS	TEMP	SIGA	SIGE :
HEIGHT (M)		:(DEC)	(M/S)	(3)	-	(DEG) : (DEG)	(DEC)	(M/S)	(3)	( DEC )	(DEG):(DEG)	(030)	(M/S)	(C) (DEG)	10561	(DEG):
1.				-1.2	2				.91					3.09		
2.	••	82.	1.56	-1.12	2 5.7	••	. 61	2.93	19.	12.5	••	96	1.60	2.81	31.2	••
4.	••	78.	1.70		9	••		3.01	.34	12.0	••	90.	1.63	2.46	30.1	••
	••	11.	2.17		~	2.2:		3.53	.19	10.6	5.1:		1.90	2.27	28.5	13.6:
16.	••	.18	16.1	0	4.6 7	3.6:	. 62	3.58	.15	9.3	5.4:	87.	2.00	2.16	26.2	14.9:
32.	••	94.	1.25	o.	6 45.1	8.8		3.61	09	8.8	6.1:		2.00	1.87	24.8	16.1:
48.	••	162.	19.	1.	3 75.9	23.2:		3.54	33	4.6	5.5:		2.18	1.60	19.9	17.1:
	-															

FEMALES FILTED DATA   1			! "	••	••	••	••	••	••	! "	! "	••	••		
## SFITTED DATA    MS   TEMP   SIGE     MS   TEMP   SIGE     MS   TEMP   TEMP   SIGE     MS   TEMP   TEMP   SIGE     MS   TEMP   TEMP   SIGE     MS		\$16E (0EG)	10.5	11.4	12.5	13.6	14.9	16.2	17.1	18	26	-1.76	18.6-	17.73	
TEMP SIGA SIGE: WS TEMP SIGA SIGE: WS TEMP SIGA SIGE: CONTROL (DEG) (DEG		\$16A (DEG)	35.6	32.7	30.0	27.5	25.3	23.2	22.1	BU*100	798	.2.341	5.014	8.693-1	
TEMP SIGA SIGE: WS TEMP SIGA SIGE:  (C) (DEG) (DEG): (M/S) (C) (DEG) (DEG): (  17 2.0 .1 : 2.86 .65 13.5 4.6 :  0.9 3.6 .3 : 2.99 .61 12.5 4.8 :  0.4 11.2 1.9 : 3.29 .61 12.5 4.8 :  0.6 48.6 10.9 : 3.14 .52 11.6 5.0 :  0.6 48.6 18.2 : 3.45 .12 9.9 5.4 :  0.7 1.520 .00 : .0491029016905 : .0  0.8 1.520 .00 : .0491029016905 : .0  0.9 1.520 .00 : .0491029151122 : .0  0.9 1.520 .00 : .0491029016905 : .0  0.9 1.520 .00 : .0491029151122 : .0  0.9 1.520 .00 : .0491029151122 : .0  0.9 1.520 .00 : .0491029116985 : .0		TEMP (C)	2.83	2.17	2.67	2.47	2.14	1.73	1.66	DTH/02			•		
TEMP SIGA SIGE: WS TEMP SIGA (C) (DEG) (DEG) (DEG): (M/S) (C) (DEG) (DEG) (DEG): (M/S) (C) (DEG)		WS (W/S)	1.49	1.59	1.70	1.82	1.95	2.08	2.16	20/00	- 0380 -	- 0203 -	- 6010.	- 2110-	
TEMP SIGA SIGE: WS TEMP SIGA (C) (DEG) (DEG) (DEG): (M/S) (C) (DEG) (DEG) (DEG): (M/S) (C) (DEG)				••	••	••	••	••					••		
TEMP SIGA SIGE: WS TEMP (C) (DEG) (DEG): (M/S) (C) (C) (DEG) (DEG): (M/S) (C) (D) (D) (D) (D) (D) (D) (D) (D) (D) (D		SIGE (DEG)	4.6	4.8	2.0	5.5	5.4	5.7	5.8	RI	05	22	85	-3.29	
TEMP SIGA SIGE: WS (C) (DEG) (DEG): (M/S)  17 2.0 .1 : 2.86 .09 3.6 .3 : 2.99 .04 11.2 1.9 : 3.14 .06 48.6 10.9 : 3.45 .06 48.6 18.2 : 3.71 .07 BU*100 RI : DU/DZ DTH 47 1.520 .00 : .049102 48 6.981 .00 : .025702 44 80.906 .00 :004400		SIGA (DEG)	13.5	12.5	11.6	10.1	6.6	9.5	8.8	BU*100	169	511	-1.099	-2.153	
TEMP SIGA SIGE:  (C) (DEG) (DEG):  (17 2.0 .1 :  (18 19.8 4.5 :  (18 19.8 4.5 :  (26 34.9 10.9 :  (17 1.520 .00 :  (23 6.981 .00 :  (4 80.906 .00 :  (7 1.520 .00 :  (6 48.6 10.9 :  (7 1.520 .00 :  (8 24.636 .00 :  (9 24.636 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00 :  (1 8 0.906 .00		TEMP (C)	.65	19.	.52	.37	.12	21	28	DTH/DZ	0290	0241	0142	0050	
TEMP SIGA (C) (DEG) ( 17 2.0 .09 3.6 .93 6.4 .64 11.2 .18 19.8 .26 34.9 1 .06 48.6 1 .05 80*100 47 1.520 23 6.981 74 24.636 44 80.906		WS (W/S)	2.86	2.99	3.14	3.29	3.45	3.61	3.71	20/00	.0491	.0257	.0135	0044	
TEMP SIGA (C) (DEG) ( 17 2.0 .09 3.6 .93 6.4 .64 11.2 .18 19.8 .26 34.9 1 .06 48.6 1 .05 80*100 47 1.520 23 6.981 74 24.636 44 80.906				••	••	••	••	••	••			••	••		
TEMP (C)		S16E (DEG)		.3	8.	1.9	4.5	6.01	18.2	RI	00.	00.	00.	00.	
LEAST SQUARES FITTED DATA  HEIGHT (M): (M/S) (C)  1.0 : 2.41 -1.17  2.0 : 2.08 -1.09  4.0 : 1.5464  16.0 : 1.5464  16.0 : 1.5464  16.0 : 1.5564  4.0 : 00/02 DTH/DZ  4.0 :0892 .0847  8.0 :0384 .0723 16.0 :0364 .0723										1 2	1.520				
LEAST SQUARES FITTED  WS  HEIGHT (M) : (M/S)  1.0 : 2.41  2.0 : 2.08  4.0 : 1.54  16.0 : 1.54  18.0 : 1.54  4.0 : -0892  8.0 : -0384  16.0 : -0363	DATA									DTH/DZ	.0847	.0723	+140.	**10*	
LEAST SQUARES  LEAST SQUARES  1.0 2.0 4.0 16.0 32.0 48.0 16.0 16.0 16.0 16.0 16.0 16.0	FITTED	WS (M/S)	2.41	2.08	1.79	1.54	1.33	1.15	1.05	20/00	0892	0384	9910	0363	
LEAST SQUAR 1.0 2.0 4.0 16.0 32.0 48.0 4.0 8.0 16.0 39.2*	ES			••	••	••	••	••	••			••	••	••	
	LEAST SQUAR	HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0		4.0	8.0	16.0	39.2*	

•	
•	
•	
•	
•	
•	
:	
•	
:	
•	
1	
•	
•	
:	
•	
•	
4	
9	
•	
i	
	٧.
	TA
	ATA
	DATA
	DATA
	DATA
	DATA C
	D DATA
	ED DATA
	TED DATA
	TED DATA
	TTED DATA
	ITTED DATA
	ITTED DATA
	FITTED DATA
	FITTED DATA
	S FITTED DATA
	S FITTED DATA
• • • • • • • • • • • • • • • • • • • •	ES FITTED DATA
••••••••••••	RES FITTED DATA
	RES FITTED DATA
••••••••••••	ARES FITTED DATA
	JARES FITTED DATA
• • • • • • • • • • • • • • • • • • • •	WARES FITTED DATA
• • • • • • • • • • • • • • • • • • • •	QUARES FITTED DATA
	SQUARES FITTED DATA
	SQUARES FITTED DATA
· 6	SQUARES FITTED DATA
• • • • • • • • • • • • • • • • • • • •	T SQUARES FITTED DATA
	ST SQUARES FITTED DATA

9.6: 9.9: 11.5: 14.2:

26.9 26.9 23.7 22.1

2.14 4.77 5.34

2.80

249. 249. 248. 246. 245.

12.0:113.0:16.0:1

34.2 28.7 25.6 23.6

4.62

2.19 2.29 2.66 2.86 3.07

: 267. 8.7: 261. 9.3: 268. 13.2: 271. 15.4: 272.

24.4 23.7 22.4 21.9 19.7

2.72 2.70 3.12 3.15 3.18

350. 341. 347. 348.

48.5.

3.03 2.86 2.59 2.33

35.4

4.63

SIGA

(M/S) (C)

(DEG): (DEG)

(C) (DEG)

(M/S)

(DEG): (DEG)

(C) (DEG)

(N/S)

: ( DEC )

PEIGHT (M)

9 ..

3.96 3.67 3.00

353.

TEMP SIGA SIGE : WD

TEMP

ES

51.5

5.05

SIGA SIGE : NO

DATE 31/03/77 TIME 12:00:00

: DATE 31/03/77 TIME 11:00:00

DATE 31/03/77 TIME 10:00:00

CBSERVED DATA

WEATHER

TEMP DEG C DEW POINT DEG C VISIBILITY (MI)

WEATHER

TEMP DEG C DEW POINT DEG C VISIBILITY (MI)

WEATHER

DEW POINT DEG C VISIBILITY (MI)

S:LOW 4 MID : LOW 1830 MID

1 TOTL

4 MID

1 TOTL

I MID

CLD (TENTHS)

LEAS! SQUARES FILLED DAIA	1			1 1 1 1 1 1		-	-	-					-			1
		SH	TEMP		SIGE		S#	TEMP	P SIGA	SIGE		SM	TENP		SIGE	
PEIGHT (M)		(N/S)		(DEG)	(DEG)		(M/S)	(3)		(DEG)		(N/S)		( DEG )	(DEC)	
1.0		2.59		26.3	4.1		2.00	5.00		8.9		2.44		33.5	5.9	
2.0		2.71		24.9	5.1		2.18			1.6	••	2.66		31.4	6.9	••
4.0	••	2.83		23.5	6.5	••	2.37		35.3	10.1	••	2.90	5.81	29.4	7.9	••
8.0		2.96		22.2	8.2	••	2.59			11.7	••	3.17		27.5	9.1	••
16.0		3.10		21.0	10.3	••	2.82			12.9	••	3.45		25.7	10.5	••
32.0		3.24		19.9	13.0	••	3.07			14.2	••	3.77		24.1	12.2	••
48.0		3.32	2.40	19.3	14.9		3.23			15.0	••	3.96		23.1	13.2	••
		20/00	DTH/02	BU*100	R.I.		ZQ / NQ	OTH/ 02	BU*100			20/NO	DTH/D2	BU*100	<u></u>	! "
4.0		1422 -	0422 0472	334	05		.0684	0452	453	17		1980.	0583	389	+1	!
0.8	,	- 1221		-1.013	38	•	. 5750	0375	-1.267	05	•	0458	- 0481	-1.081	18	•

-3.68

-2.097 \*\*\*

-.0277 .0013

.0250 .0144

-1.15

-4.76

-2.529 969 --

.0203 -.0222

-2.175 -1.94

.00116 -.0229

16.0

CBSERVED DAT	47																			
CLD (TENTHS) CLD HT (M) EXPCNENTS NET RADIATION RICHARDSON NO (1/L)*10 USTAR		13 0741	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	03/77 TIME MEATHER MP DEG C NT DEG C NT DEG C O MID HI O MID HI O MID HI O MID - MSG- MW/C O (8M)-1.73 O (8M)-2.25 C (8M).2325	1 ME   85   1 ME   1 ME	8.7 -7.9 85 1 TOTL HI 7620 CM2 CM2 13(16M)-3.2 ISERVED DA1.2	13:00:00 8.7 7.5 1 TOTL 4 HI 7620 2.09 2.16M)-3.28 16M)-3.28 (16M)-2.16 (16M).2289		S 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A C C C C C C C C C C C C C C C C C C C	11 ME   6   11 ME   6   11 ME   6   11 ME   6   12 ME   6   13 ME	14:00 HI TC 16N	1 040-1		DATE 31/0 TEM DEW POIN VISIBILI COW 1830 A=12 B (4M)21 (4M)29 (4M)59 (4M)59	17 0 17 0 17 0 17 0 17 0 17 0 17 0 17 0	LOOF NO-O	TIME 15:00:00  C 8.9  C -10.1  H TOTL  HI HI  MV/CM2  -60(16M)-1.2  (GBSERVED DAT  -81 (16M) -33	7.00 TL 4 0ATA) 0ATA)	
HEIGHT (M)	::	WD (DEC)	WS (M/S)	TEMP (C)	00	SIGA DEG)	SIGE (DEG)	:	MD ( SEG ) (	MS T	TEMP (C)	SIGA DEG1	SIGE (DEG)		MD DEG)	MS (W/S)	TEMP (C)	SIGA (DEG)	\$16E (DEG)	" ::
1. 2. 4. 8. 16. 32. 48.		237. 237. 237. 246. 252. 249.	2.27 2.48 2.66 2.73 2.80 3.17		112 112 65 50 32 97	31.2 30.6 229.0 27.6	11.8 15.5 15.9	! !	254. 252. 241. 241. 252. 249.	3.09 3.39 3.39 3.61 4.05	7 30 6 69 6 47 6 28 6 01 5 96	34.7 33.8 31.3 30.1 27.8	12.3 14.2 18.1 21.8		248. 245. 240. 240. 241. 241.	3.58 3.91 4.26 4.36 5.14	6.98	22.8 21.6 20.5 19.0 17.1	8.0 8.6 11.1	15.000
LEAST SQUARES	ES	FITTED WS (M/S)	DATA	TEMP (C)	SIGA (DEG)	16A EG) (	SIGE (DEG)		WS WS	TEMP (C)	,	SIGA DEG) (	SIGE IDEG)		WS (M/S)		TEMP (C)	SIGA (DEG)	SIGE (DEG)	! " "
1.0		2.16		-05	2.	6 ~	9.9		3.00		38	9.6	5.5		3.35			5.4	4.2	
0.8		2.6		5.85	31.	2 - 1	9.8		4	• •	33		9.6		3.90			21.6	6.3	
16.0 32.0 48.0		2.77 2.94 3.05		.95	29.9		14.6		3.73	6.00	28 26 25		14.9		4.54 4.89 5.12	6.03		18.4	9.3	
		20/00	DT H/DZ		BU*160	00	3.1	0	Z0/00	0TH/02	80*100	100	RI		ZQ/NQ	DTH/02		BU*100	R.I	
6.0		.0532	0434	!	407		13		0604	0541	271		60.		0988	0587		216	03	
16.0		.0142			3.075	1	2.93			0228	-1.474	•	19		0288	0285			1.58	
* 09	SER	DBSERVED DAT	TAT	-	1	-			-				-	-				-		!

4	1
۲	
4	Į
C	3
_	
5	2
u	
2	
٥	
U	Ļ
	μ

100	SIGE : (DEG):  5.8: 5.8: 5.7: 6.7:
DATE 31/03/77 TIME 18:00:00 :  WEATHER  TEMP DEG C 8.9 :  VISIBILITY (MI) 50 :  LOW 1 MID HI TOTL 1:  LOW 1830 MID HI :  A=17 B= .14 P= .13  -5.79 MW/CM2 :  (4M)00 (8M)01(16M)04:  (39.192M)-1.36 (OBSERVED DATA):  (4M)01 (8M)01 (16M)03:	16A S EG) (1 15.3 14.5 13.2 11.9
TIME 18  C	C) (DEG) ( 6.80 6.85 15.3 6.21 14.5 6.60 13.2 6.56 11.9 6.36 10.1
177 177 100 110 110 110 110 110 110 110	
DATE 31/03/77  NEATHER  TEMP DEG  DEW POINT DEG  VISIBILITY (MID  LOW 1 MID  LOW 1830 MID  A=17 B= .14  -5.79  (4M)00 (8M)  (39.192M)-1.36  (4M)01 (8M)	2.59 2.90 3.33 3.60 3.81
: DATE 31/03/77 TIM : MEATHER : TEMP DEG C : DEW POINT DEG C : VISIBILITY (MI) : LOW 1 MID HI : LOW 1830 MID : A=17 B= .14 P= : (4M)00 (8M)00 : (4M)00 (8M)00 : (4M)01 (8M)00 : (4M) 2209 (8M) .212	40 DEG1 254. 253. 242. 242. 247. 247. 240.
3: L 3: L 3: L 3: L 3: L 3: L 3: L 3: L	SIGE: WD (DEG):(DEG) : 254. : 253. 6.2: 242. 6.6: 247. 8.3: 240. 9.5: 237.
DATE 31/03/77 TIME 17:00:00 :  WEATHER  TEMP DEG C 8.7  DEW POINT DEG C -9.4  VISIBILITY (MI) 50 ::  LOW 1830 MID HI TOTL 3:L  A=-15 B= .25 P= .11  7.26 MW/CM2  (4M)09 (8M)26(16M)55 ::  (4M)27 (8M)36 (16M)37:  (4M)27 (8M)36 (16M)37:	16A S EG 1 14.5 113.0 111.5 9.9
TIME 1 1 50 -9 1 50 -9 1 1 6 -9 1 30 6 (100 5 6 6 1)	MS TEMP SIGA (M/S) (C) (DEG) 7.35 3.91 7.30 14.5 4.25 6.53 13.0 4.71 6.73 11.5 5.06 6.66 9.9 5.40 6.28 8.8 5.52 6.09 9.8
03/77 WEATHER MP DEG (NT DEG (NT DEG (NT DEG (NT DEG (NT NT DEG (NT NT N	1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DATE 31/03/77 TIME  WEATHER  TEMP DEG C  DEW POINT DEG C  VISIBILITY (MI) 5(1)  LOW 1830 MID  A 15 B - 25 P = 7.26 MW/C)  (4M)09 (8M)26 (4M)26 (4M)26 (4M)36 (4M)36 (4M)26 (4M)26 (4M)26 (4M)26 (4M)26 (4M)27 (8M)36 (4M)26 (4M) -	(M/S) 3.91 4.25 4.71 5.06 5.40
DATE DEW VISI LLOW A= - (44) (44)	WD (DEG) 256. 256. 255. 255. 255. 257.
5 64 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	SIGA SIGE: WD (DEG): (DEG) (DE
8.9 -8.9 85 1 TOTL HI 7620 CM2 CM2 5106M)-1.55 (16M)-1.67 (16M)-1.60 (16M)-289	16A S EG) ( 23.1 23.1 20.4 20.4 19.4
TIME L HE C C B EG C C B EG C C B HI I HI I D AW/CM2 30 MW/CM2 4)65(1 4)65(1 4)87 (	255
MEATHER TEMP DEG C DINT DEG C ILITY (MI) MID HI 830 MID HI 6 BE - 15 PE 20.30 MW -21 (8M) -6 2M)-2.20 (DE 2M)-2.20 (DE 2M)-2.20 (DE 2M)-2.86	
DATE 31/03/77  WEATHER  TEMP DEG  DEW POINT DEG  VISIBILITY (MI)  OM 4 MID  LOM 1830 MID  A=06 B= .15  20.30 M  (4M)21 (8M)  (4M)21 (8M)  (4M)20 (8M)	MS M
	276. 276. 276. 276. 272. 269.
zo	
CLD (TENTHS) :: CLD HT (M) :: EXPONENTS NET RADIATION :: RICHARDSON NO.: (1/L)*10 ::	HE IGHT (M) 1. 2. 4. 8. 16. 32.

LEAST SQUARES FITTED DATA

0.000	3.15		(C) (DEG)	(DEG)		(M/S)	0	(DEG)	(DEG)		(M/S)	(0)	(DEG)	(DEG)
2.0	3.37		23.6	5.8		3.67	7.13	15.7	3.5		2.42		18.1	1.4
0.4	3.37	7.46	22.6	4.9		3.96	7.08	14.2	4.2	••	2.66	69.9	1991	4.5
8.0			21.7	7.2	••	4.27	7.00	12.8	5.0	••	2.92		14.3	5.0
	3.60		20.8	8.0		4.62	6.83	9.11	5.9	••	3.20		12.7	5.5
16.0	3.85		19.9	8.9		4.99	95.9	10.4	7.0	••	3.51		11.3	1.9
32.0 :	4.12		161	8.6		5.38	6.21	4.6	8.3	••	3.85		1001	6.7
. 0.84	4.29		18.7	10.5		5.63	6.13	8.9	9.5	••	4.07		4.6	7.2
0 :	20/00	DTH/DZ	BU*100	R I		20/00	DTH/DZ	BU*100	R.I.		DU/DZ	DTH/02	BU*100	R.
	0753	0345	170	05		1096	0313	960	05		- 9060	0005	003	00
	.0402	0300	517	61		. 2650.	0262	275	13	••	. 1640.	90000-	013	10
16.0 :	. 0215	0210	-1.269	-1.59		. 0320	0159	575	55	••	.0273	80000-	059	+00-
	1610	0119	-3.661 -	64.61		. 6100	6100*-	340	31	••	- 9010	++00*-	-1.560	-4.03

		¢	•
	٠		_
	۰	п	٦
	4	e	1
		3	•
	1		٦
	۰	-	•
	1	2	٥
	۱	4	
	3	÷	_
		•	~
		-	۷
	٠		
			1
		4	5
		ı	7
	1	٦	n
	3	5	37

DATE 31/03/77 TIME 21:00:00 ::  WEATHER  TEMP DEG C 2.2 ::  DEW POINT DEG C -10.5 ::  VISIBILITY (MI) 25 ::  DW MID HI TOTL 0:  LOW MID HI ::  A=29 B= .48 P= .21 ::  (4M) .23*(8M)1.31*(16M) 4.34 ::  (4M) .23*(8M)35.6*(16M)************************************	6.8 6.8 6.5 8.2.6 11.9: 1.9: 1.9: 1.9: 1.9: 1.9: 1.9: 1.9
DATE 31/03/77 TIME 21:00:00  WEATHER  TEMP DEG C 2.2  DEW POINT DEG C -10.5  VISIBILITY (MI) 25  LOW MID HI TOTL O  LOW MID HI TOTL O  (4M) .23*(8M)1.31*(16M) 4.34  (4M) 2.58*(8M)35.6*(16M)******  (4M) 2.58*(8M)35.6*(16M)******  (4M) 2.58*(8M)35.6*(16M)*******  (4M) 2.58*(8M)35.6*(16M)*******  (4M) 1.02*(8M).047*(16M)*******	TEMP SIGA (C) (DEG) -1.10 6.8 -27 6.5 3.18 4.5 4.07 3.1 4.36 2.6 4.41 3.5
: DATE 31/03/77 T  WEATHER  : TEMP DEG C  : VISIBILITY (MI)  3:LOW MID  : LOW MID  : A=29 B= .48  : (4M) .23*(8M)1.  : (39.192M) 9.80 ( 9: (4M) 2.58*(8M)35  4: (4M) 1.02* (8M).0	47. 17. 17. 17. 10. 10. 10.
	MD (OEG) (ND (OE
.37 DATA)	SIGE: WD (DEG): (DEG) (D
DATE 31/03/77 TIME 20:00:00:00:  WEATHER TEMP DEG C 3.9  DEW POINT DEG C -10.7  VISIBILITY (MI) 25  .OW MID HI TOTL O::  A=56 B=03 P= .70  -9.07 MW/CM2  (4M) .31 (8M) .39(16M) .37:  (4M) 4.32 (8M) 3.37 (16M) 1.49:  (4M) 4.32 (8M) .0392 (16M) .0614:	14.3 14.3 17.1 11.7 11.7 11.7 3.6 3.6 3.6 3.6
MEATHER MP DEG C ITY (MI) ID MID MID MID MID -9.07 MW/ -9.07 MW/ 11 (8M) .33.3	CC 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
: DATE 31/03/77 TIP WEATHER : TEMP DEG C : VISIBILITY (MI) I:LOW MID HI : LOW MID HI : LOW MID HI : LOW MID HI : (4M) .31 (8M) .31 : (4M) 4.32 (8M) 3.31 I: (4M) 4.32 (8M) 3.31 I: (4M) 4.32 (8M) 3.31	33.1.58 33.1.58
DATE DEW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW CLOW C	WD (DEG) (CDEG)
~ 4 0 00 i	SIGE: WD (DEG): (DEG): (DEG): 256.99
6.7 -10.2 50 TOTL HI -7CM2 51(16M) 6 BSERVED DATY 56 (16M) 04.7	SIGA (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (
MEATHER MP DEG C ITY (MI) ID MID MID MID MID MID MID MID MID MID	1 1 1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
DATE 31/03/77 T WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI) DW I MID HOW I MID	
DATE 31/03  WE  TEMP  TEMP  VISIBILIT  VISIBILIT  LOW 1 MID  LOW 1830  A=51 B=  (4M) .28  (4M) .28  (4M) 3.54  (4M) 3.54	241. 241. 249. 249. 260. 260. 258. 258. 8 FITTED
S 10N 0.	M)
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO. (1/L)*10	HEIGHT (M) : WD WS  1. : (DEG.) (M/S)  2. : 24185  4. : 250 . 1.27  8. : 249 . 1.87  16. : 250 . 2.56  32. : 258 . 2.98  48. : 258 . 3.11  LEAST SQUARES FITTED DATA

HEIGHT (M)	 WS (W/S)	CC)	SIGA (DEG)	\$16E		(W/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)
1.0	.71	3.91	10.3	4.		.29	2.58	28.8	2.4
2.0	 .95	4.03	7.2	• 5		.48	2.73	9.61	2.4
4.0	 1.26	4.26	5.1	9.		.17	3.02	13.4	2.3
8.0	 1.68	4.67	3.5	8.		1.25	3.55	9.1	2.3
16.0	 2.24	5.31	2.5	1.0		2.03	4.37	6.2	2.2
32.0	 2.99	5.79	1.7	1.3	••	3.30	5.12	4.2	2.2
48.0	 3.54	5.23	1.4	1.5	••	4.38	4.67	3.4	2.2

8888

4.033 9.873 16.836 7.126

.3406 .2811 .1620

.1083

8888

.1222 .0755

.1295 .1051 .0852 .0488

.33

4.164 7.738 10.100 -.366

.0818 .0972 .0845 .0565 .0081 -.0006

4.0 8.0 16.0 39.2\*

1:1

1.64 1.90 2.50 2.55 2.95 3.42 BU\* 100

DTH/D2

20/00

BU\*100

DTH/DZ

70/00

80\*100

DTH/DZ

70/00

13.850 17.636 16.509 8.147

	4
1	-
	M
1	0
	0
1	K
	2
ď	SE
	8

	10: 0 :: 0 :: (A): (A): 518:	GE :	••	•• ••	.7:	4.3:	2.5:	2.9:
: DATE 01/04/77 TIME 00:00:00  WEATHER  TEMP DEG C -2.6  DEW POINT DEG C -12.2  VISIBILITY (M!) 20	DW MID HI 2 TOTL 2:LOW MID HI 3 TOTL 3:LOW MID HI 7620 : LOW MID	TEMP SIGA SIGE :		1				
-2.6	HI HI • 38 (164 (164 (166	SIGA DEG)		1001		7.	5	8
TIME	HI NW/C -22 (088 1.15	d a	96.	-1.88	16.	+1.	.0.	+9.
THER DEG DEG	110 35 8M) 8M)	10						
WEA WEA TEMP DINT	MID 3 8= 000 000 000 000 000 000 000 000 000	WS (M/S)		1.37	1.78	2.48	4.29	3.87
TE O	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	00		. 8	2.	7.	7.	7.
4 0 >	MOJ 4 5 5 5 5 1	: 0E	••	. 89				
00	20 3 • 33 • 44 • 0602	SIGE: WD (DEG):(DEG)			2.3:	.7	6.	1:0
TIME 23:00:00 C -1.9 C -11.7	6 10 10 10 10 10 10 10 10 10 10 10 10 10	S -		8.9	.2	8.	.5	9.
E 23	3 HI CM2 9016 9016 19 (1	S I G						
1 200	H 1 2 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	TEMP SIGA (C) (DEG)	-1.84	-1.74	-1.28	1.84	3.69	3.64
03/77 WEATHER MP DEG NT DEG	MID 4.3	S						
31/0 TEM POIN	43 B . 29 92M) 3.83	MS (M/S)		3.02	m	5	5.	5
: DATE 31/03/77 : WEATHER: TEMP DEG : DEW POINT DEG : VISIBILITY (MI	0W 0W 4W) 4W)	#D EG3		145.	39.	.53.	.55.	.09
	2: 1		••			1.1:1		
00:	1.57 1.57 1.038	SIGE (DEG			-	-1	•	
4E 22:00:00 -2.2 -12.6 25	11 7 11 7 16M) 16M) 16M)	SIGA SIGE: WD (DEG) (DEG):(DEG)		7.1	3.5	3.8	1.9	
. HE .	4/CM 99( 99( 69 69 69	S	09	98	4	15	93	36
THER FG C	4 9 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	TEMP (C)	-1.60	-1.36		3.4	4.93	4.86
WEATHER MP DEG NT DEG	B= -9.6	MS (M/S)		1.44	.75	3.79	4.18	4.28
31/ TE POI	. 62 1928 9.7	2						4
DATE 31/03/77 MEATHE TEMP DEC DEW POINT DEC	LOW A= - (4M) (4M) (4M)	: WD		153	162.	183.	187.	188.
			••		••	••	••	
	CLD (TENTHS) :: CLD HT (M) :: EXPONENTS :: NET RADIATION :: RICHARDSGN NO.: (1/L)*10 :: USTAR ::	Ξ						
	CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATIO RICHARDSON N (1/L)*10 USTAR	HE IGHT (M)	-	4 4	80	16.	32.	48
	X YOU	포						

LEAST SQUARES FITTED DATA

		••	••	••	••	••	••	"		**	**	•
SIGE	10.1	7.9	6.2	4.9	3.8	3.0	5.6	2	00.	00.	00.	00
SIGA (DEG)	10.9	6.6	0.6	8.2	7.5	8.9	6.5	80+100	.800	2.668	9.975	27.082
TENP (C.)	-2.08	-2.06	-2.02	16.1-	-1.55	28	1.72	DTH/D2	.0353	.0495	.0781	1180
WS (W/S)	.95	1.23	1.60	2.07	2.69	3.49	4.06	20/00	-1402	6060.	.0590	- 0238
		••	••	••	••	••	••	-		••	••	
SIGE (DEG)	3.8	5.9	2.2	1.6	1.2	6.	8.	I W	8	00.	00.	00
\$16A (DEG)	9.6	7.3	5.4	4.1	3.0	2.2	1.9	80*100	1.722	4.138	7.959	1.252
TEMP (C)	-2.38	-2.08	-1.49	14	1.39	3.53	3.73	DTH/D2	.2876	.2498	.1742	0000
(N/S)	2.16	2.59	3.10	3.73	14.4	5.37	2.97	20/00	.1898	.1139	.0683	0075
		••	••	••	••	••	••		-	••	••	•
\$16E (DEG)	5.1	3.2	2.0	1.3	. 8	.5	4.	RI	00.	00.	00.	00
SIGA (DEG)	13.6	8.8	5.8	3.7	2.4	1.6	1.2	BU*100	5.110	10.634	118.91	1.706
TEMP (C.)	-1.85	•						0TH/02	.3629			
(M/S)	1.24	1.59	2.02	2.58	3.29	4.19	4.83	20/00	.1655	.1055	.0673	2900
		••	••	••	••	••	••			••	••	••
HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0		4.0	8.0	16.0	30.24

••	••	••	••	101	••	••	**	: 4:	. IV	**	113:	E :	: 19	••	••	••	:0:	. 8 :	5.4:	6.1	-
								26.2	DAT	1744	11.00					_					-
	:	0.0	•	10	Ŧ	600-	12	[ 16M)	RVED	116N	191)	SIGA	DEGI		16.9	15.1	12.6	9.6	7.8	29.5	
	3	31- 3	1 20	H	4875	P= -	MW/C	.20*	COBSE	1.04	083*	d M		.20	111	.55	.23	.03	89.	.29	
THER	DEG (	DEG (	IH	101	01	.87	.93	8M)	.33	8M)	8M).	TE	2)	•							-
WEA	EMP	INT	LITY	MID	I	8=	-2	1 * (	î	3* (	*0	MS	M/S)		1.37	1.62	1.98	2.56	1.88	.72	-
	1	DO M	SIBI			00		1. (	.192	1.1	1.09										
		DE	1	MO	LOW	A=		14M	(39	14 M	(4M	M	DEG		87	83	75	17	72	45	
••	••	••	••	1:01	••	••	••	52 :	[ A ) :	***	042:	3E :	: (9	••	••	••	:5.2	1.5:	.8.2	.0.6	-
				JIL				7.6	DAT	***(1	0.0	SIC	10)								-
	1.	0.0	_	17	H	27	12	16M1	RVE	191 X	(10)	IGA	EG)		14.4	12.9	6	5.6	. 4	38.	-
		1-10	20	11	875	- = 4	IW/Ch	22*(	OBSE	19.34	37*	l d	-	11	.75	17	09	19	+9	33	
HER	EG C	EG C	(IW)	101	0	66.	63 N	M11.	) 15	M1 2	M).	TE	3	-1-	-1-	-2-	7	·	-	5	-
WEAT	MP	NTO	ITY	011	M	8=	-3.	5 (8	-	8) 01	8 (8	SI	1/8)		70	.03	14.	.72	48	.51	-
	TE	POI	IBIL	2.		10.		.2	1924	3.0	.084		2		-	2	"	2	-		
		DEW	VIS	MO	LOW	= V		( 4W)	(39.	( W+)	(4W)	3	DEG)		101	97.	98.	115.	149.	223.	
••	••	••	••	10:1	••	••	••	: 7	4):	**	:06	 w	): (9	••	••	••	.8.	:1:	.5:	.8	-
								4.5	DAT	***	00.	\$16	(DE								-
	0.	8.		TO	Ī	.29	2	16M)	RVED	M91)	W91)	IGA	EG)		18.6	16.7	10.7	9.1	10.8	4.7	
	0	- 7	20	1	875	P=	W/CM		OBSE	.87	169			03	86	32	41	19	61	10	
HER	EG C	5 S	(IW)	H 01	4		2	1 CM	1 19	M160	M).0	TEM	(3)	-2.	-1-	-2.	-1.	•	-;	3.	
WEAT	MP D	O IN	ITY	01	M	- =8	-7-	8 (8			2 (8	NS	181		+0.	.21	.45	11.	.59	.27	
	TE	P01	IBIL	Σ		.35			192M	18.9	.029				1	1	1	7	2	2	
		DEW	VIS	MO	LOW	- = V		(4M)	139.	( WT)	( 4M )	9	DECI		80.	80.	93.	126.	177.	212.	
				:		••	••	::			••						••	••	••		
				HSI	-		AT ION	N NC		01			3								
				TEN	11 (1)	ENT	RADIA	NR OSC		1111	STAR		THO	-	2.	4	8	16.	32.	48	-
				107	1 07	XPON	IET A	ICHA		-	'n		HE								
		C 0.0 : WEATHER : WEATHER C 0.0 : TEMP DEG C 1.1 : TEMP DEG C	HEATHER HEATHE	: WEATHER : TEMP DEG C 1.1 : TEMP DEG C 1.1 :	: WEATHER : WEATHER : WEATHER : WEATHER : WEATHER : WEATHER : TEMP DEG C 1.1 : TEMP DEG C -10.0 : DEW POINT DEG C -10.0 : DEW POINT DEG C -10.0 : VISIBILITY (MI) 20 : VISIB	#EATHER : WEATHER : WEATHE	: WEATHER : WEATHER : WEATHER : WEATHER : WEATHER : WEATHER : TEMP DEG C 1.1 : TEMP DEG C -10.0 : DEW POINT DEG C -10.0 : DEW POINT DEG C -10.0 : DEW POINT DEG C -10.0 : VISIBILITY (MI) 20 : VI	: WEATHER : WEATHER : WEATHER : SEMPLOSE C 1.1 : TEMP DEG C 1.1 : TEMP DEG C 1.1 : TEMP DEG C 1.1 : SEMPLOSE C -10.0 : SEMPLOSE	### ##################################	#EATHER  #EA	#EATHER  #EA	#EATHER  #ID  #ID  #ID  ##EATHER  ##EATHER  ##EATHER  ##EATHER  ##ID  ##EATHER  ##EATHER  ##ID  ##EATHER  ##ID  ##EATHER  ##ID  ##ID  ##EATHER  ##ID  ##	TEMP DEG C 0.0   TEMP DEG C 1.1	### ##################################	TEMP DEG C 0.0   TEMP DEG C 1.1	TEMP DEG C 0.0   TEMP DEG C 1.1	TEMP DEG C 0.0   TEMP DEG C 1.1	TEMP DEG C	TEMP DEG C	TEMP DEG C	TEMP DEG C

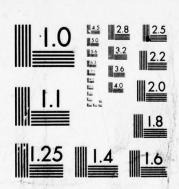
		¥S.	TEMP		SIGE		H.S	TEMP	SIGA	SIGE		SM	TEMP	SIGA	SIGE
HEIGHT (M)		(M/S)	(0)	(0EG)	(DEG)	••	(M/S)	(0)	(DEG)	(DEG)	••	(M/S)	(3)	(056)	(DEG)
1.0		.84	-2.35	25.1	4.9		3.09	-2.12	10.7	.2		1.93	33	13.9	4.
2.0	••	1.03		9.61	4.4		2.56	-2.00	10.8	4.		1.82	31	13.9	8.
4.0		1.26		15.4	3.9	••	2.11	-1.76	10.9	.7		1.72	12	13.9	1.4
8.0	••	1.54		12.0	3.5	••	1.75	-1.30	11.0	1.4	••	1.62	18	13.9	5.6
16.0	••	1.89		4.6	3.1		1.45	42	11.1	5.9	••	1.52	•03	13.9	4.8
32.0		2.31		7.4	2.7	••	1.20	1.16	11.3	5.7		1.43	.59	13.9	8.7
48.0	••	2.60		4.9	2.5		1.07	2.51	11.3	8.5	••	1.38	1.33	13.9	12.3
		20/00	DTH/D2	BU*100	8.1		20/no	DTH/02	BU*100	RI		20/00	07H/02	80*100	R. I
4.0		.0856	.1375	5.020	00.		1348		1.632	00.		0342		.622	00.
8.0	••	.0524	.1348	13.101	00.		0557	.1218	9.185	00.		1910	.0353	3.106	00.
16.0	••	.0321	.1294	33.417	00.		0230		49.501	00.		0076		16.731	00.
39.2*		0200	.0862	78.751	00.		9090	~	66.677	00.		0725	-	43.170	00.

CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO.		I S I S E 6	EATHER P DEG T DEG TY (MID MID NID = .07	C -1 C -1 1 20 HI 20 HW/CM		0:00 ::  TL 10:  *****:  DATA):	DEW VISI LOW LOW A=	1/04/17 WEATH WEATH DINT DE JLITY ( MID II M	11 ME C C C C L 11 20 HI 4875 5 P= MW/CM 004 (	5:00 .6 .4 .707 .107 .23	:00 L 10 05 DATA)		S	MEATHER WEATHER TEMP DEG OINT DEG ILITY (MI MID 10 MID 10 1 B= .29 -1.81 -0.6 (8M)	TIME C C - 1 25 HI 25 HBI 25 WW/CM	06:00:00 1.7 3.9 TOTL HI -42 12 16M1 .5 RVED DAT	. 57 100
USTAR USTAR HEIGHT (M)	: (4M) : (4M) : (DEG)	# ? !	25	100	* · · · ·		(4M) (4M) (DEG)	.05 (8M 081 (8M #S	.3007 EMP S	1	.06 .3083 SIGE (DEG)		0	(8H) (8H)	538 P S	1	3.36 .0387 SIGE (DEG)
1. 2. 4. 8. 16. 32.	31 27 20 20 27 27 262		1.53 1.66 1.58 1.27 1 1.39 2	24 24 20 25 38 5 2 38 5 46 46	24.0 26.3 40.4 70.6 57.6 48.5	13.9 21.5 15.6 17.6	291. 287. 277. 285. 281.	8 5 2 8 8 8 2 8 8 8 8 8 8 8 8 8 8 8 8 8	1.60 1.65 1.61 1.62 1.66 1.26	8 - 0 0 4 4 0 4 4 - 6 4	2.5	1	198. 203. 197. 1 217. 1 218. 2 219. 2	.67 .90 1.21 1.65 2.22 2.45 2.45	35 35 35 36 37 37	12.4 6.0 6.3 4.2	0.1.1
LEAST SQUARES HEIGHT (M) :		FITTED DATA WS (M/S)	DATA TEMP		A 0	16E :	MS (M/S)		EMP SIGA		SIGE DEG1		WS (M/S)	TEMP	S1GA (DEG)		SIGE DEG)
1.0		1.53	.24	1		3.8	3.17	17 1.51 71 1.53 34 1.56			7.9		.51	1.35	18.1		400
8.0 16.0 32.0 48.0		1.54	2.5	38.0 46.4 56.8 64.0		15.8 17.4 17.9	5.09 5.96 6.98 7.65		00 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		22.08		1.21 1.61 2.15 2.55	1.37	- 8.4 - 8.4 - 8.5		1.20
	0	20/00	DTH/DZ	80*100	0		20/00	DTH/D2	80*100		R.		ZQ/NQ	DTH/DZ	BU*100		12
8.0 16.0		00015	.1033	2.521 8.925 26.777		000	.1346	.0224	.159		800		.0591	.0129	2.634 8.678		000

AD-A049 036 UNCLASSIFIED	TURBUL	UGWAY I	PROVING EASUREM MALDRON	GROUND ENTS ON	UTAH A FORT	Y-E16HT	METER	TOWER 1	IN DESE	F/6 4/2 RTET	c(U)	
3 OF S AD AO49036						翻						
											-	
	Ī						Ī					
	fft —		Ñ		Ī				Ĭ.			
	III -		Ī									
			Ī		M		Ü					



049036



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-4

DATA	
4	
_	
VED	
×	
SE	
08	
C	

	: CATE	: CATE 01/04/77 TIME 07:00:00	1 IME	00:10		DALE	: DATE 31/04/77 TIME 38:03:03	TIME 1	08:00		DATE	: DATE 01/04/77 TIME 09:00:00	-	E 09:00	00:0
		WEAT	HER SW-		••		WEATHER	HER		•		WEATHER SW-	HER SW		
		TEMP DEG C		1.1	••		TEMP DE		9.0	••		TEMP C	) EG C	9.0	
	: DEN	DEM POINT DEG	3	-3.2	••	DEW	DEW POINT DEG C		-1.7	••	DEW	DINIDO	D 93	-2.2	
	: VIS	VISIBILITY (MI	-	-	••	VIST	VI SIBILITY (MI)	(IMI)	8	••	VISI	VISIBILITY (MI)	(IW)	01	
CLD (TENTHS)	*COM	7 MID	3 HI	TOT	1:01	MO	J MID	3 HI	TOT	101	LOW	S MID	H +	TOTL	L 10:
CLD HT (M)	. LOW	M 915 MID 2440 HI	0 2440	H	••	MOT :	LOW 915 MID 2440 HI	2440	H	••	LOW	LOW 915 MID 2440 HI	D 244	IH 0	
EXPONENTS	. A= -	27 8= -	.36 P=	.23	••	A=	22 8= -	=d +0.	.12	••	A=	23 8=	-0 90°	60.	
NET RACIATION	••	-1-	-1.81 MW/C	/CM2	••		1.(	1.04 MW/CM2	M2	••		2.	2.93 MW/CM2	CM2	
RICHARDSGN NO.: (4M)36 (8M)	M+) :	136 (8	;	67(16M)	. 33 :	( MT)	(4M)70 (8M)-1.51(16M)	41-1.51	(16M)	: +9.	(4M)	(4M)37 (8M)76(16M)	7 (MI	(W91)9	1.13
	: (39.	(39.192M) 8.38	0	BSERVED DATA):		(39.1	(39.192M)66.95 (OBSERVED DATA):	95 (085	ERVED	DATA):	(39.1	(39.192M) **** (DBSERVED DATA)	** (08	SERVED	DATA)
(1/1)*10	M+) :	(+M)99 (8	18M)90	(16M)	1.19:	-(M4)	1.87 (8)	41-2.00	(16M)	4.30:	-(M4)	1.00 (	MI-1.0	2 (16M	12.58
USTAR	. (4M)	_	18M) -2194	(16M)	.1034:	(4M).	94 (16M).1034: (4M).2687 (8M).2698 (16M).0749: (4M).2875 (8M).2781 (16M).0558	41.2698	(16M)	:6740.	(4M).	2875 (8	M) .278	M91) 1	.0558
	0.5	S.M.	TEMP	•	\$16E :	Q.	S.M.	TEMP	SIGA	SIGE :	QM	MS	TEMP	SIGA	SIGE
HEIGHT (M)	: ( DEC )	(M/S)	(3)	(990)	(DEG): (DEG)	( DEG )	(M/S)	(C) (DEG)	DEG)	(DEG): (DEG)	(DEG)	(H/S)	(3)	(C) (DEG)	(DEG):
1.			6.33		••			6.07		••			4.48		
2.	: 171.	. 2.04	00.	7.8	••	169.	15.5	.62	8.4	••	145.	2.88	1.23	9.5	
.,	691 :		64	7.0	••	166.	2.87	•15	6.9	••		3.30	.74	7.5	
.8	: 165.	2.71	.85	6.2	5.4:	191	3.21	66.	1.9	3.8:		3.67	1.30	5.8	4.2
16.	: 169.		2.98	5.5	4.5:	165.	3.39	3.54	5.5	3.5:		3.81	3.72	4.8	4.1
32.	: 168.	3.75	.34	4.8	3.5:	162.	3.57	.72	1.4	3.3:	138.	3.80	1.05	4.8	4.2:
48.	: 171.	4.36	5.67	2.9	2.7:	162.	3.76	4.81	4.3	3.6:		3.88	3.45	4.7	4.7

<	ľ
1	
<	C
2	۵
c	1
L'E	j
=	
FITT	•
-	4
u	
v	7
u	J
a	•
COLLABEC	I
=	)
	ı
v	7
-	
U	2

	••	SM			SIGE		MS	TEM		SIGE	••	SM	TEMP	SIGA	SIGE
HEIGHT (M)		(M/S)	(3)	(DEG)	(DEG)		(M/S)	3	(DEG)	(DEG)		(M/S)	5	(050)	(050)
1.0		1.71			11.8		2.40	2.73	9.6	4.0		2.88	2.40	10.2	3.6
2.0	••	2.00			9.5	••	2.60	2.57	8.2	3.9	••	3.06	2.33	8.7	3.8
4.0	••	2.35			7.1		2.83	2.27	7.0	3.8	••	3.25	2.21	7.4	3.9
8.0	••	2.76			5.6		3.08	1.78	0.9	3.7	••	3.45	2.01	4.9	4.1
16.0		3.24			4.3	••	3.34	1.22	5.2	3.6	••	3.66	1.78	5.5	4.2
32.0	••	3.80	1.49	4.1	3.4	••	3.63	1.77	4.4	3.5	••	3.89	2.03	4.7	4.4
48.0	••	4.17			5.9		3.82	4.56	4.0	3.4		4.03	3.20	4.3	4.5
		20/00	DU/02 01H/02	BU*100	۳. 1.		20/00	DTH/02	BU*100	۳ 1	-	20/00	0TH/02	BU*100	=
4.0		.1256	.12561606	-1.656	-1.24		- 7870-	.1211	860	35		.0652	0438	237	07
8.0	••	.0737	+101	-3.047	-6.11		-0428 -	0775	-1.866	-1.51	••	.0346	0256	492	22
16.0		.0432	0110.	1.485	00.	••	.0232	1600.	161.	00.	••	.0184	2010	.726	00.
39.2#	•	.0381	1272	15 505	00		0	2464	663 00	00	•	0000	00		•

			1													
			TEMP DEG	2 SW-			TEMP DEG	ر م	5.5			TEMP	MEATHER MP DEG	NS C	.2	
		DEM PO	POINT DEG	7		3	0	٠. ن	1.7		: DE	DEM POINT		1 4	2.2	
LD (TENTHS)	:.0	04 6	VISIBILITY (MI)	· · 1	TOTL 10	2	MID	(4I) 4 HI	TOTL	91	101:	10 41	Ē	C7. IH	TOT	2
CLD HT (M)			15 MID	S HI			15 MID	4875			. LOW	152	MIN		- :	
EX PONENTS		A=07		10 P= .19		1 - = V :	1	2 P=	.11		# <b>4</b>	32 8	25.40	2000	*1.	
RICHARDSON NO	• •:	(4H)	-	05(16M)	0	( W+) :	.25 (8M)		=	.76	. (4M	-	(8 m	.34(15M		19.
		7		111	DA	: (39.1	2M1 4.	108	0	DATA	-	.192M	*1.	OBSE	0	ATA)
(1/L)*10		4M)	06 (8M)	07 (16M	M)06	(4M) 2 (4M) 1	.87 (8		EE	30.19		3138	( 8 K)	2.53	(W91)	3.82
			1		100	9				11 5	1			1	1'	
HEISHT (M)	. :	1 (930):	M/S)	C) (DEG)	(DEG)	: (050)	(M/S)	(0)	EG 1	16E	: (DEG	Ξ.	/8) (6	0 0	EG) (	DEG
1.			, ,	2.80												
2.		294.		18	3	: 292.		16.	6.01		: 292	. 5	1 6	.77	8.3	
*		291.		17			4.09	.43	6.5		: 286	9	1 5	.23	7.2	
.8				2.55 16.	.4 5.8	: 284.	4.56	2.53	8.8	4.5	: 282.	9	2 2	2.10	6.5	4.
16.				15			5.03	4.86	7.5	3.8	••		4 5	.32	4.4	5.9
32.				15			5.39	3.15	7.1	3.3			75 1	.84	3.3	3.
48.	: 2	283.	5.52	14	7.4		90.9	6.21	6.7	3.0	!	. 9.	3	.39	3.3	2.
LEAST SQUARES		FITTED	DATA													
		MS	TEMP	S	\$16E	SM .	TE	-	GA S	16E		M.S.	TEMP	SIGA	S AS	-
PETGHT (M)		(M/S)	(3)	(DEC)	EG)	S/W) :	2)	100	1 (9	EG	-	W/S)	(3)	( DE	-	U.
1.0		2.71	2.69			3.0	6.	11.			100	00	1.57	10.8	-	=
2.0	••	3.10			4.2	3.47	1.	10.						8		
0.4	••	3.53		17.		3.91		6				6.	1.96	7.(		
8.0	••	4.03		16.		14.41	2	8	4			.5	2.43	5.6		
16.0	••	4.60	2.37	15.	5.9	: 4.98	3.	7.	8 3	8.		7.17	3.15	4.5	5 3	4.
32.0		5.25				9.6	4.	7.		•	••	6	3.59	3.6		
48.0		5.67		14.	7.1	0.9		7 6.	6 3	•		8.38	2.84	3.		
		20/00	DTH/DZ	BU*100	3.1	20/NO :	DTH/07	80*1	00	_	100 :	20	DTH/CZ	BU*100	a 00	_
4.0		.1558	0130	059	02	: .1578	.171	.63		00	1. :		.1305	.214	•	*
8.0		.0889	9010*-	4	05	0680 :	.155	82	•	00	1. :		1065	.573		00.
16.0		.0507	0900	258	08	: .0502	.1253	4.589	. 2	00	0. :	. 9850	0587	1.035	•	00
20 24		7710	0.00	u	00	0170							0,00			0

-	
-4	
-	
CATA	
•	
-	
•	
-	
-	
ш	
_	
-	
_	
~	
u.	
ш	
- 2	
S	
-	
a.	
-	
OBSERVED C	

	. DAT	: DATE 31/04/77 TI	TIMIT L	ME 13:00:00		DATE	: DATE 01/04/77 TIME 14:00:00	I I ME	14:00		DATE	110411	: DATE 01/04/77 TIME 15:00:00	15:00	00:
		WEATHER	HER S				WEATHE	453				WEATH	WEATHER SW-		
		TEMP [	) EG C	1.7	••		C dwaL		4.7	••		TEMP DE		5.2	
	: DE	DEM POINT DEG C	DEG C	-1.7	••	DEW	DEM POINT DEG C		-0.6	••	DEW	DEW POINT DEG C		9.0-	
	: VI	VISIBILITY (MI)	(MI)	75	••	VISI	VISIRILITY (MI)	1 (1)	0	•	VIST	VISIBILITY (MI)	-	•	
CLD (TENTHS)	FLOW	LOW 10 MID	IH	TOT	1: 01 7	LOW	O MID	IH	TOT	1:01 1	1 MO.	OIM C	H	1707	10:
CLD HT (M)	FOM :	LOW 152 MID	0.	H	••	LOW	OIM 910 MID		Ŧ	••	LOW	: LOW 610 MTF		H	
EXPONENTS	: A=	A=14 B= .03 P=	.03 P=	91.	••	A=	A=19 B=02 P=	.02 P=	.15	••	A=	: A=16 R=09 P=	=0 60	.14	
NET RADIATION		18.	18.14 MW/CM2	: M2	••		25.	40 MW/C	M2	••		10.8	13.88 MW/CM2	12	
RICHARDSON NO.	( M+) :	•00		1(16M)	.17 :		03 (8)	M)07	(16M)	: 61	(44)	18) 10	(44)01 (8M)03(16M)	1 191	. 10.
		.192M1 5.	-	BSERVED DATA):	DATA):		(39.192M) 11 (03SERVED	11 (095	ERVED	DATA):	(39.19	32M1***	(39.192M)**** (NRSERVED DATA)	RVED	STA1 :
(1/1)*10	H+) :	(4M) .55 (8M)	IM) 1.13	1.13 (16M) .36:	.36:	( M )	(4M)08 (8M)	11'- (M	11 (16M)13:	13:	(44)	04 (8)	(44)04 (8M)05 (164)05:	(164)	05
USTAR	H+) :	[4M].2563 (8M).20	20	16 (16M).2223:	.2223:		(4M).4141 (8M).4087 (16M).4132:	M) . 4087	(16M)	.4132:		8) 8069	[44].5908 (8M).6724 (16M).6668	(164)	6999
1999	3	MS			\$16E :	GI	M.S.	TEMP	SISA	SIGE :		WS	TEMP	164	391;
HEIGHT (M)		-	(3)	(053)	(DEG):(DEG)	(DEG)	(M/S)	(C) (DEG)	DEGI	(DEG): (DEG)		(M/S)	(C) (DEG) (DEG):	1990	DEC.)
1000		08.84						4.66					3.48		
2.	: 308		2.63		••	292.	4.59	4.50	10.2	••	274.	7.93	2.35	1.9	
4.	: 302		2.10		•	288.	5.64	4.16	8.8	••	272.	8.98	1.93	9.9	
8.	: 300		2.35		4.5:		6.13	4.07	7.6	:9.4		10.37	2.07	5.9	4.6
16.	: 303.	. 5.34	4.18	7.1	4.4:	285.	6.63	3.88	9.9	3.6:	270.	11.38	1.88	5.7	4.0:
32.	: 301		1.93		4.4:		99.9	3.79	6.5	4.3:		12.37	2.17	4.8	3.9
48.	: 302		1.90		4.8:		8.06	3.24	5.7	4.2:		12.35	1.42	4.6	3.8

LEAST SQUARES FITTED DATA

HETCHT (M)		NS (M/S)	TEMP	SIGA	SIGE		SM	LEND	SIGA	SIGE	•• ••	(M/K)	TEMP	STGA	SIGE
0		3.52	10	1-	4.2		4.37	4.45	11.4	4.4		7.39	2.60		5.4
2.0	••	3.93	2.41	9.3	4.2		4.83	4.42	10.01	4.3	••	8.17	2.56	7.7	5.0
4.0	••	4.38		8.4	4.3		5.35	4.35	8.8	4.3	••	5.03	2.47	6.3	4.7
8.0	••	4.88		7.6	4.4		5.93	4.21	7.7	4.2	••	9.98	2.32	1.9	4.4
16.0	••	5.44		6.9	4.5		6.56	3.97	6.8	4.2	••	11.04	2.05	5.5	4.1
32.0	••	90.9		6.2	4.6		7.27	3.58	0.9	4.1	••	12.21	1.70	6.4	3.9
48.0		6.45		6.6	4.6		7.72	3.32	5.5	4.1		12.94	1.60	4.6	3.7
		20/NO	DT H/ DZ	8U*100	3.1		20/00	DTH/DZ	BU*100	۳ آ		20/NO	DTH/02	BU*100	a -
4.0		.1584	.0650	.193	00.		-1822 -	.0240	047	03		.3029	0301	021	10
8.0	••	.0883	.0471	.450	00.		- 6001.	.0215	138	07	••	.1674	0253	058	03
16.0	••	.0492	.0113	.346	00.	••	- 6550.	+910.	345	61	••	.0926	7510	117	07
39.5*	••	.0075	1800.	1.170	00.	••	- 6875 -	.0244	-2.495 -	-19.65	••	0013	0369	-1.321	80

<	
۰	
<	
2	
_	
-	
u	
VED	
a	
PCF	
v	
	۰

				JEATHED			•	3	UEATUED					3	WEATHER		
			TEMP OF	טבני נ	2 4			TEME	DEC C	a		100		TEMP	DEG C	101	
	•	•			0.1			100	000	9 (			-		000	200	
	••	DEW P	POINT	DEG C	-5.3		DEN	N POINT	DINT DEG C	-5.0	0.		DE	DEW PUINT			3
	••	VISIB	>	C W	0			118161	Ī				7	SIBILI	5	82	
CLU LIENINS		-OM 9	OIM 6	Ŧ	10	TOTL 9	. COM	8 MID	H	-	TOTL	8	LOW	S MID	7	-	TOTL
CLD HT (M)	••	1 107	1525 MID	0	IH		FOM :	1830 MID	MID	I	Ħ	••	FON :	1830	MID	2440 HI	
EXPONENTS	••	A=18	_	.24 P.	10. =		: A=	.18 B=	=12	P= .	10.	•	. A=	11 8=	.36	P= .1(	0
NET RADIATION				25.40 MW/	/CM2				32.66 M	MW/CM2		-			H -96-41	MW/CM2	
RICHARDSON NO		- (M4)	87 (8)	11-2-	61 ( 16M)	1-5.32	( 4M)	-77.3	(8M)-2	-265. (16M)	6M)-1	704.	(4M)	165	( 8M)-	1.90¢16M	41-3.
			12M1-9-	02 (0)	BSERVED	DATA	: (39.	39-192M1#		COBSERVED		DATA):	(39	-	00	COBSERVED	ED DATA
(1/1)*10	••	(4M)-2.34	.34 (8	41-3.	4 (8M)-3.44 (16M)-3.	(16M1-3.50		-202.			-	-461.	W + )	64M)-1.76	-(MB)		-
USTAK		1441.2300	200 18	07.1	1011 61	0/67.10	( W+1		7 (WO)	1 616.2	LOT		Et	1907-1	100	11 0617	70110
	**	Q#	NS	TEMP	SIGA	SIGE	ON :	SM				SIGE :	S.	SM	1- 1-	4	A SIGE
HEIGHT (M)		(930):	(N/S)	3	(DEG)	( DEG) : (	: ( DEC)	2	(2)	-		(DEG) :	SEG :	ž		-	(DEG)
1.	"			6.18	89				8	8.49					10.04	40	
2.	••	164.	2.40	6.04			: 78.				45.2		310.				
*	••	158.	2.67	5.5	8 11.5		: 60.		.7 96.		7.4	•	306.	. 2.29		9.39 39.0	0.
8	••	154.	2.86	5.4							7.1	29.1:	298				
16.	••	158.	2.98	5.2							4.4	33.9	321				
32.	••	154.	2.97	5.08		1.6 0	: 43.			7.73 7	72.0	35.2:	334	. 2			.9 25.2
48.	••	154.	3.02	4.88							6.6	21.4	325	. 2			
LEAST SQUARES	RES	FITTED DATA	DATA														
	"	SH		TEMP	SIGA	SIGE		WS	TEMP	SIGA		S16E :		MS	TEMP	SIGA	SIGE
HEIGHT (M)	**	(M/S		(3)	(DEG)	(DEG)	-	H/S)	(3)	(DEG)		DEG1 :	•	H/S1	(3)	(DEG)	(DEG)
1.0		2.39	9 5.98		14.4	4.0		-92	8.31	33.6		41.7		1.93	9.84	45.3	7.
2.0	••	2.51			12.7	4.7		.93	8.28	38.0		38.5 :		2.07	9.78	41.8	9.5
4.0	••	2.6			11.2	9.6	••	+6.	8.22	45.9		5.6 :		2.22	6.65	38.6	12.
8.0	••	2.75	5 5.62	29	6.6	9.9	••	.95	8.11	48.4		32.8 :		2.37	9.45	35.6	15.7
16.0	••	2.8		56	8.8	7.8	••	96.	7.92	54.7		3.3		5.54	9.06	32.9	20.
32.0	••	3.0	12 4.93	93	7.8	9.2	••	16.	7.64	61.7		3.0		2.73	8.59	30.4	25.
						-											-

71.1-60.9-

.0511 -.0493 .0274 -.0410 .0147 -.0246 .0081 .0000

-.03

-1.097

.0028 -.0174 .0014 -.0149 .0007 -.0099

-1.86 -1.88

-.336 -1.005 -2.050 -1.511

.0408 -.0413 .0214 -.0338 .0112 -.0189 .0031 -.0025

4.0 8.0 16.0 39.2 **OBSERVED DATA** 

-.0099 -9.586 -12.84 -.0081 -46.489-863.29

-.556 -1.616 -3.383

2

BU\*100

DU/DZ DTH/DZ

E.

: DU/DZ DTH/DZ BU\*100

2

DU/DZ DTH/DZ BU\*100

4
-
4
0
u
>
a
W
S
98
-

!		••	••	••	:			**
2.25 0ATAI	SIGE				20.	16.4	16.8	20.1:
13.6 -2.8 85 TOTL HI .11 CN2 2(16M)-2. 15ERVED DA	TEMP SIGA SIGE : (C) (DEG) :		46.7	41.3	36.1	31.0	30.8	30.7
TIME C C C C C C C C C C C C C C C C C C C	ENP C	1.85	11.62	0.76	66.0	0.85	14.0	0.29
0000 0000 0000 0000 0000 0000 0000 0000 0000								
DATE 04/04/77 TIME 14:00:00  WEATHER  TEMP DEG C 13.6  DEW POINT DEG C -2.8  VISIBILITY (MI) 85  LOW 1525 MID HI TOTL 3  LOW 1525 MID HI TOTL 3  (4M)40 (8M)-1.12(16M)-2.25  (4M)-1.08 (8M)-1.50 (16M)-1.49  (4M)-1.08 (8M)-2213 (16M)-2.223	WS (W/S)		2.18	2.41	2.67	2.88	3.10	3.09
DEW VISI OEW VISI OEW VISI OF (4M)	MD DEG1		350.	346.	344.	353.	353.	353.
		••	••	••	:0	.5:	.4:	19.0:
2.12 DAT	SIG							
DATE 04/04/77 TIME 13:00:00 ::  WEATHER  TEMP DEG C 12.8 ::  OW 3 MID HI TOTL 3:  LUW 1525 MID HI TOTL 3:  46.40 MW/CM2 ::  (4M)33 (8M)97(16M) -2.12 ::  (4M)91 (8M) -1.29 (16M) -1.40:  (4M)93 (8M) -2311 (16M).2326:	TEMP SIGA SIGE: WD		32.7	32.9	32.9	26.7	25.6	26.0
I ME I B S S S S S S S S S S S S S S S S S S	3	20	00	81	25	35	66	15
DATE 04/04/77 TIM WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI) OW 3 MID HI COW 1525 MID A=09 B=21 P= 46.40 MW/ (4M)91 (8M)-1.2 (4M).2283 (8M).231		===	11.00	10.	10	10.	6	6
MEATHER MP DEG NT DEG NT DEG S MID 5 MID 46.40 3 (8M) 1 8M) 1 8M) 1 8M)	WS (M/S)		5.46	09.	.72	66.	.27	.30
15.00 MEATH TEMP DEC PUINT DEC 15.00 BE 19.00 BE 19								
: DATE 04/04/77  : DEW PUINT DEG : VISIBILITY (MI 6:LOW 3 MID : LOW 1525 MID : LOW 1525 MID : A=09 B= .21 : (4M)33 (8M) 7: (4M)91 (8M)	SIGA SIGE: WD (DEG) (DEG):(DEG)		5.	360.	353.	360.	2.	28.7: 2.
	E :	**	••	••	.3:	.5:	.2:	.7:
DATE 34/34/77 TIME 12:30:30 :  MEATHER  TEMP DEG C 11.7 :  DEW POINT DEG C -2.8 :  VISIBILITY (MI) 85 :  OM 6 MID HI TOTL 6:1  LOW 1525 MID HI HI :  A=16 B= .20 P= .09 :  46.40 MW/CM2 :  (4M)-1.63 (8M)-4.76(16M) -9.93 :  (4M)-4.31 (8M)-6.26 (16M) -6.51 :  (4M)-4.31 (8M)-6.26 (16M) -6.51 :	SIG							
11.7 -2.8 95 TOTL H1 -0.9 (CM2 CM2 CM2 CM2 CM2 CM2 CM2 CM2 CM2 CM2	IGA G)		8.69	54.6	1.0	15.0	12.5	13.2
ME 11 11 11 11 11 11 11 11 11 11 11 11 11		3						
HER EG C (MI) HI 0.20 P= 0.20	TEMP (C.)	10.53	10.37	9.6	9.7	9.5	9.2	8.9
24/77 MEATHER MP DEG NT DEG NT DEG SHIP MID								
DATE 34/34/77 TIN DATE 34/34/77 TIN WEATHER TEMP DEG C VISIBILITY (MI) LOW 6 MID HI LOW 1525 MID HI (4M)-1.63 (8M)-4.7 (4M)-1.63 (8M)-6.2 (4M)-1.545 (8M).16.7 (4M).1545 (8M).16.7 (4M).1545 (8M).16.7 (4M).1545 (8M).16.7 (4M).1545 (8M).16.7 (4M).16.4 (8M).16.7 (4M).16.7 (4M).16	MS (M/S)		1.37	1.49	1.5	1.5	1.7	1.9
10 48 1 1 10 11 1	!							
DAT   CON	: (DEG)		292.	290	286	298	296	292
20	. !	••	••	••	••	••	••	••
OI NO OI	HEIGHT (M)							
(TENTHS HT (M) ONENTS RACIATI HARDSON (1/L)*10 USTAR	H	-	5	4	8	16.	32.	48.
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO. (1/L)*10 USTAR	HE IC							
1 222.1	1							

-	ι
-	
DATA	ľ
-	١
-	•
-	
E	•
-	
FIT	
-	
-	
1	
0.6	
v	7
u	J
AP	•
-	ľ
-	i
=	(
1105	2
U	,
-	
V	i
u	ì
-	۰

		24.	TEMP	SIGA	SIGE		SM	TEMP	SIGA	SIGE	•• •	MS	TEMP	SIGA	SIGE
		16/21	3	-	(DEG)	. !	(S/E)	3	-	inee	.	(M/S)	3	(056)	(DEC)
1.0	••	1.26		8.19	13.1	••	2.27	10.88	36.5	7.7	••	2.08	11.50	49.5	20.0
2.0	••	1.35		4.09	15.1	••	2.43	10.83	34.2	0.6	••	2.25	11.44	45.0	19.7
4.0	••	1.44		53.9	17.4		2.60	10.74	32.1	10.4	••	2.43	11.32	40.9	19.3
8.0	••	1.53		48.1	20.1	••	2.79	10.57	30.1	12.0	••	2.62	11.11	37.1	18.9
16.0	••	1.64		45.9	23.1	••	2.99	10.28	28.5	13.9	••	2.83	10.76	33.7	18.6
32.0	••	1.75	90.6	38.3	26.6	••	3.20	9.90	26.5	16.1	••	3.06	10.36	30.6	18.2
48.0	•	1.82		35.8	58.9		3.33	9.19	55.5	17.5	••	3.20	10.34	28.9	18.0
		20/00	DT H/DZ	BU*100	R I		20/00	DTH/D2	80*100	r.		20/00	DTH/02	BU*100	
4.0		. 9160.	.03140465	-1.246	38		- 9650.	0338	276	08		.0623	0446	416	08
8.0	••	. 8010.	0387	-3.645	-2.96		- 6180.	0285	811	48	••	.0336	0369	-1.183	82
16.0	••	0600	0232	-7.675	-8.45		- 1710.	6210	-1.775	-2.12	••	.0182	0215	-2.366	-4.10
39.5*	••	.0110.	0044	-6.983-1	04.601		- 6100.	0050	-2.466	-2.59	••	9000	0012	695	22
*	BACED	A DRC ED VED DATA	-			-					-				

```
: DATE 04/04/77 TIME 15:00:00 :
                        WEATHER
                        TEMP DEG C
                                     13.9
               : DEW POINT DEG C -2.6
               : VISIBILITY (MI) 85
CLD (TENTHS) :LOW 3 MID HI TOTL 3:
CLD HT (M) : LOW 1525 MID HI :
              : A= -.10 B= .09 P= .11
EXPONENTS
                          33.00 MW/CM2
NET RADIATION :
RICHARDSON NO.: (4M) -.33 (8M) -.96(16M)-2.19 :
               : (39.192M) -.57 (OBSERVED DATA):
   (1/L)*10 : (4M) -.91 (8M)-1.29 (16M)-1.44:
   USTAR
              : (4M).1722 (8M).1761 (16M).1800:
               : WD WS TEMP SIGA SIGE :
  HEIGHT (M) :(DEG) (M/S) (C) (DEG) (DEG):
              :
                               12.66
       1.
             : 346. 1.80 12.50 50.4 : 341. 2.03 11.79 46.5 : 332. 2.06 12.10 44.2 16.6:
       2.
       4.
       8.
              : 336. 2.33 11.96 41.3 17.3:
: 334. 2.39 11.61 40.3 18.0:
      16.
      32.
              : 340. 2.70 11.35 35.9 19.9:
      48.
  LEAST SQUARES FITTED DATA
  : WS TEMP SIGA SIGE: HEIGHT (M): (M/S) (C) (DEG) (DEG):
      1.0 : 1.68 12.39 53.7 13.6
2.0 : 1.81 12.35 50.3 14.4
      2.0 : 1.81 12.35 50.5
4.0 : 1.96 12.28 47.1 15.4
     16.0 :
                   2.30 11.89 41.3 17.5 :
     32.0 :
                   2.49 11.54 38.6 18.6 :
     48.0 : 2.61 11.38 37.2 19.3 :
              : DU/DZ DTH/DZ BU*100 RI
     4.0 : .0520 -.0259 -.370 -.07 : 8.0 : .0281 -.0222 -1.081 -.74 : 16.0 : .0152 -.0148 -2.453 -4.38 : 39.2* : .0194 -.0062 -5.144
```

15.0  -2.3  DEW POIL  B5  TOTL  3:LOW  3:M  HI  LOW  183  CCM2  CCM2  CCM2  CCM2  CCM2  CCM2  CCM2  CCM3  M  HI  10.0  CDEG CDEG CDEG CMS  17.2  17.4  10.3  CDEG CDEG CMS  17.5  SIGA  17.4  10.4  CDEG CDEG CMS  17.5  SIGA  17.5  SIGA  17.6  17.6  17.7  SIGA  SIGE  MS  CDEG CDEG CMS  17.6  17.7  SIGA  17.6  17.6  17.7  SIGA  SIGE  MS  CMS  CMS  CMS  CMS  CMS  CMS  CMS	TEMP DEG  VISIBILITY (MI LOW 3 MID LOW 1830 MID A=07 B= .19 (4M)15 (8M) (4M)15 (8M) (4M)75 (8M) (4M)75 (8M) (4M)75 (8M) (4M)42 (8M) 13 3.08 12 16 3.88 12 6 4.23 12 8 4.23 12 WS TEMP	14.5 -3.3 35 TOTL HI -10 CM2 N.10 SERVED 7 (16M) 7 (16M) 8 ISA SISA SISA SISA SISA SISA SISA SISA	3:LOW 3:LOW C (4M) 6: (4M)	TEMP DE POINT DE POINT DE 181L ITY ( 3 MID 1830 MID -3.6 -3.6 -3.6 -3.6 -3.6 -3.6 -3.6 -3.6	HI BS	00 00 00 00 00 00 00 00 00 00 00 00 00
(TENTHS) :LOM 3 HID HI TOTL 3:LOW 3 HIT (M) :LOM 1830 MID HI :LOM 1830 MID :LOM 18	LOW 3 MID  LOW 1830 MID  A= -07 B= -19  9-42  (4M)15 (8M)  (39-192N)-9-16  (4M) -2753 (8M)  (MMS) TEMP  WS TEMP  WS TEMP  WS TEMP  WS TEMP	7 10 .10.	(4M) (4M) (4M) (4M) (6EG) (6EG) 353.	1830 HID 1830 HID 1830 HID 1840 HID 1042 (8M 1042 (8M 1042 (8M 1075) 1075 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1076 1	HI -07 -07 -07 -16 -16 -16 -19 -19 -19 -19 -19 -19	
(M) : (4M).2994 (8M).2993 (16M).2963: (4M).2753  WD MS TEMP SIGA SIGE: WD MS:  13.26 3.43 12.00 17.2 8.4: 13.3.0  3.92 12.24 16.3 8.7: 6.3.8  3.98 11.95 16.4 10.4: 6.4.1  3.99. 4.14 11.66 17.1 12.3: 8.4.2  WS TEMP SIGA SIGE: WS:  (M) : (M/S) (C) (DEG) (DEG): (M/S)  3.24 12.76 17.3 6.0 3.34  3.24 12.76 17.2 7.0 3.34  3.42 12.66 17.2 7.0 3.34  3.42 12.47 17.0 8.0 3.38  4.18 11.73 16.6 11.7 : 4.30  1.00/D7 074/D2 8U*100 RI : 0U/D2 DI  2.0636037617603 : .07910	(4M).2753 (8M).  WD WS TE (DEG) (M/S) (C 13. 3.08 13 10. 3.34 12 11. 3.60 12 6. 3.88 12 6. 4.17 12 8. 4.23 12 MS TEMP	(16M). S13A S S13A S DEG) ( 113.6 113.0 112.1 112.1	360 353 360 353 359 359 359	MS MS (M/S) 1.74 1.88 2.01 2.01 2.21	21001	8.6 9.2 12.1
SQUARES FITTED DATA    13.26	13. 3.08 13 10. 3.34 12 1. 3.46 12 6. 3.88 12 6. 4.17 12 8. 4.23 12 WS TEMP		360 353 353 353 353 353 353	0.09		8.6 9.2 12.1 13.7
SQUARES FITTED DATA    3.59	10. 3.34 12 1. 3.60 12 6. 3.88 12 6. 4.17 12 8. 4.23 12 WS TEMP	Construction and	.0: 353 .0: 353 .3: 359 .1: 357			8.6 9.2 12.1 13.7
SQUARES FITTED DATA  SQUARES FITTED DATA  (M): (M/S) (C) (DEG) (DEG): (M/S)  3.62 12.47 17.0 8.0 3.34  3.62 12.47 17.0 8.0 3.34  3.62 12.47 17.0 8.0 3.34  3.63 12.16 16.8 9.3 3.35  4.05 11.78 16.6 11.7 ; 4.13  4.18 11.73 16.6 11.7 ; 4.30  COUNDY DTH/OZ BU*IOO RI : DU/OZ DI  3.045037617603 : .07910	6. 3.88 12 6. 4.17 12 8. 4.23 12 WS TEMP		.1:			12.1
SQUARES FITTED DATA  SQUARES FITTED DATA  I WS TEMP SIGA SIGE: WS  (M): (M/S) (C) (DEG) (DEG): (M/S)  3.06 12.81 17.5 5.2 : 2.89 1  3.24 12.76 17.3 6.0 : 3.11 1  0 : 3.42 12.47 17.0 8.0 : 3.34 1  0 : 3.83 12.16 16.8 9.3 : 3.85 1  0 : 4.05 11.78 16.6 11.7 : 4.13 1  1 : DU/D7 DTH/D2 8U*IO0 RI : DU/D2 DT  1 : 00636037617603 : .07910	8. 4.23 12 WS TEMP		.4:			13.7
SQUARES FITTED DATA  ** WS TEMP SIGA SIGE: WS  (M): (M/S) (C) (DEG) (DEG): (M/S)  3.06 12.81 17.5 5.2 : 2.89 1  3.24 12.76 17.3 6.0 : 3.11 1  3.42 12.76 17.2 7.0 : 3.34 1  3.62 12.47 17.0 8.0 : 3.58 1  0 : 3.82 12.16 16.8 9.3 : 3.85 1  0 : 4.18 11.73 16.6 11.7 : 4.13 1  1.01/DZ DTH/DZ BU*IOO RI : DU/DZ DT	100			1	2.10 19.6	
(M): (M/S) (C) (DEG) (DEG): (M/S)  : 3.06 12.81 17.5 5.2 : 2.89 1  3.24 12.76 17.2 7.0 : 3.34 1  3.62 12.47 17.0 8.0 : 3.58 1  0 : 3.62 12.47 17.0 8.0 : 3.58 1  0 : 3.62 12.47 17.0 8.0 : 3.58 1  0 : 4.05 11.78 16.7 10.7 : 4.13 1  1.00/DZ DTH/DZ BU*IOO RI : DU/DZ DI  0 : .0636037617603 : .07910	T				340 640 640	
3.06 12.81 17.5 5.2 : 2.89 1 3.11 1 3.42 12.76 17.2 7.0 : 3.34 1 3.42 12.66 17.2 7.0 : 3.34 1 3.62 12.47 17.0 8.0 : 3.58 1 3.85 1 4.05 11.78 16.7 10.7 : 4.13 1 4.18 11.73 16.6 11.7 : 4.30 1 : 00/07 0TH/02 80*100 RI : 00/02 DI : 0.0636037617603 : .07910		SIGA SIGEO	GE : (	WS TEMP M/S) (C)	S 16A (DEG) (	SIGE DEG)
3.24 12.76 17.3 6.0 3.11 1 3.42 12.66 17.2 7.0 3.34 1 3.34 1 3.62 12.47 17.0 8.0 3.34 1 3.58 1 4.05 11.78 16.7 10.7 3 4.13 1 4.18 11.73 16.6 11.7 3 4.30 1 5.00/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ DTH/DZ BU*100 RI : DU/DZ DTH/DZ DTH/D	1 68.	15.1 4	. 6 : 1	.69 12.62	20.4	4.6
3.42 12.65 17.2 7.0 3.34 1 3.62 12.47 17.0 8.0 3.53 1 4.05 11.78 16.7 10.7 4.13 1 4.18 11.73 16.6 11.7 4.13 1 5.04.02 0TH/02 8U*100 RI : 0U/02 0T	11.		••	1.78 12.62		5.6
3.83 12.16 16.8 9.3 3.85 1 4.05 11.73 16.6 11.7 4.13 1 4.18 11.73 16.6 11.7 5 4.30 1 5.04.02 0TH/02 8U*100 RI 5 0U/02 DI 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.0	.34			77:		8.6
: 4.05 11.78 16.7 10.7 : 4.13 1 : 4.18 11.73 16.6 11.7 : 4.30 1 : 00/02 0TH/02 8U*100 RI : 00/02 DI : .0636037617603 : .07910	85					7.0
8.0 : 4.18 11.73 16.6 11.7 : 4.30 1 : 00/02 0TH/02 8U*100 RI : 00/02 0T 4.0 : .0636037617603 : .07910	.13	11.7 8	. 8 . 2		20.4	12.0
: 00/02 0TH/02 8U*100 RI : 0U/02 : .0636037617603 : .0791 -	.30	11.4 9		:		3.4
: .0636037617603 : .0791 -	707 DTH/DZ	8U*100 R	Z0/NO : 1	DZ 07H/DZ	80*100	RI
. 0226 - 0213 - 626 - 26 .	0266		160. : 10	1	.051	00
. 63+0 63. +36 6150	250221			_	.126	00.
-1.01 : .0228	280131	776	800 : .008	20005	.033	
		1		!	700	• 1

21:00:00	.3 TOTL 1 30	2 16M) 2.88 RVED DATA! (16M) 79.76 (16M).0178	1GA S 1GE EG) (DEG)	9 6	. 7.	3.6 2.			(DEG)				1.4	2.3		00.		000	-
TIME	1 = d		EMP SIGA	55		84			(DEG)	13.9	8.01	6.5	5.1	3.6	80*100	6.977	15.073	5.997	
ATHER DEG	DEG (MI	-7.61 MW/CM 0 (8M) 1.95( 1) 2.88 (0BSE 2 (8M)73.52 0 (8M).0207	WS TE			2.96 9		TEMP	2	0	ů-	7.38		10.96	DTH/DZ	1		.0094	
	DEW POINT VISIBILITY DW 2 MID LOW 1830 M A=36 B=	(4M) .90 (39.192M) (4M)32.72 (4M).0320	WD DEG.)	163. 1				MS	(S/W)	1.10	1.35	2.04	2.51	3.69	20/00	.1156	11100	0106	
	5								-	••					1	-	••		-
20:00:00	4 TOTL 7	. 44 0. 4	SIGE (DEG)		-	10.4		SIGE	(DEG)	.3	* 1	: :		3.8	18	00.	00.	000	
TIME 20:0	30 1 1 1 1 1 1 1 1 1 1 1	I-W	SIGA (DEG)	6	- 70 -	54 4.3		SIGA	(DEG)	7.6	2.9	5.1	4.5	3.7	80*100	4.586	3.620	3.991	
E C	DEG C Y (MI) MID MID.	-7.95 M +(8M)31 .08 ( .08 ( .08) **	WS TEMP /S) (C)	6.41	01:			W (	3	6.65	7.02	8.97	16.01	12.52		:	.2763 13		
E 04/	DEW POINT VISIBILITY W 2 MID OW 1830 M =19 B=	4M) .24 39.192M) 4M) 2.7 4M) 086*	=		230. 3.			SM	(M/S)	8	5.0	.12	.23	2.34	70	!		.0092	
DAT	O A	2233	1 9	22					1						1	.	•	• ;	-
00:		2 16M)**** : RVED DATA): (16M)****: (16M).0000:	SIGE :		6.4:	9.5:			DEG	2.6 :	3.5	6.2	8.3 :	11.11	8.1 :	00	. 00.	000	
IME 19:00:00	-3.9 85 TOTL HI =07	7CM 97( 88E 88E	SIGA (DEG)	112 77 22.0		8 53.1 9 40.4	7 - 5 T	16A						41.4 1	04100			10.852	
FR		9.19 MW (8M) 69. 1.33 (0 (8M) ***	TEMP (C)	10.1	111.7	11.9	in in	TEMP	3		10.59			12.35	1		(-1	w 4	
14	POINT DEG BILITY (P 2 MID 1830 MID 25 B= .4		WS (M/S)	.82	.85	.82	DATA		-						DT H/02	.1188	.0979	.0562	
	DEW POINT DEG C VISIBILITY (MI) OW 2 MID H LOW 1830 MID A= .25 R= .41	(4M) 19.21 (39.192M) (4M) **** (4M) .0000	: WD	247.	262.	317.	FITTED DATA	SH	(C/E)	96.	16.	.82	.78	.74	20/00	0146	6900	.0106	
						• •• ••			-	••			••						
	CH2		3				SQUARES	3	E .	•						-		. *	
	CLD (TENTHS) CLO HT (M) EXPONENTS	NET RADIATION RICHARDSON NO (1/L)*10 USTAR	HEIGHT	-2.4	8	32.	LEAST S		HE IGHT (M)	1.0	2.0	8.0	16.0	32.0		4.0	8.0	39.24	

4	۹
+	-
4	1
C	2
0	2
L	U
3	>
	Ľ,
L	1
4	^
0	2
0	7

		DAIE OFFICE LIA	I I W	E 22:00:00	: 00:0	DATE	DATE 34/34/77	TIME	TIME 23:00:00		DATE	: DATE 05/04/17		TIME 00:00:00	00:0
		WEATHER	HEP.				WEATHER	1ER				WEATHE	THER		
		TEMP DEG C	DEG C	3.9	•		TEMP DE	0 9	2.2			TEMP L	DEG C	3.4	
	. DEW	DEM POINT DEG	DEG C	4.4-	•	DEW	DEW POINT DEG	J 9	+.4-	••	DEM	DEM POINT DEG C	DEG C	-3.9	
	: VIS	VISIBILITY	(MI)	20		VISI	VISIBILITY (MI)	MI) 2	0		VISI	BILITY	(IH)	20	
CLD (TENTHS)	*FDM	2 MID	Ŧ	TOTL	2:	LOW	2 MID	Ŧ	TOTL	7	MOT	2 MID	:LOW 2 MID HI	TOTL	11 2
CLD HT (M)	*07 :	1830 MID	0	Ħ	••	LOW	1830 MID		Ħ		TOM	1830 MI	10	IH	
EXPONENTS	: A= -	03 B=	=d 44.	.29	•	A=	11 8=	=d ++.	.17		A=	14 B= -	08 P=	.22	
NET RADIATION	••	-7.	-7.26 MW/	CM2	••		-7.2	36 MW/C	M2	••		-7.	.26 MW/	CM2	
RICHARDSON NO.	( H+) :	.67	•	62(16M) 3.37	3.37 :	( W+)	.12* (84	11 . 41*	( TOW)	6.52 :	( W + )	.22* (1	3M) . 20	* ( 16M)	5.29
	: (39.	(39.192M)****	100	SERVED DATA):	DATA):		(39.192M) .34 (08SER)	34 (085	(OBSERVED DATA):	DATA):	(39.1	92M)	.00 (OBSERVED DATA)	SERVED	DATA
(1/1) #10	: (4M)	18.56 (8	IM151.0	1 (164)	*****	( MT)	.87* (8M	1) 3.59	*(16M)	: ** **		2.29+(1	8M) 1.0	0*(16M	*****
USTAR	: (4M)	(4M).0350 (8M).0213 (16M).0136: (4M).120* (8M).095* (16M).0098:	IM), 021	3 (164)	.0136	(4M)	120* (8#	11.095*	(16M)	:8600.		1 *880	(4M).088* (8M).116* (16M).0116	W91) *	0.0116
	QN	N.S.	TEMP		SIGE :	9		TEMP		516E :	QM	MS	TEMP	SIGA	SIGE
HEIGHT (M)	: ( DEG )	(M/S)	(0)	(050)	(DEG):(DEG)	(DEG)	(M/S)	(C) (DEG)		(DEG): (DEG)	(DEC)	(M/S)	5	(C) (DEG)	(DEG):
1.			2.46					2.45					.92		
2.	. 98	1.13	2.83		••	104.	1.68	2.73	9.9	••	128.	1.49	1.09		
4.	. 96 :	1.47	2.85		••	.86	2.20	2.54	5.6	••	119.	1.99	.80		
	: 98.	1.93	4.00	24.7	3.8:	97.	3.09	3.81	4.5	2.9:	117.	2.77	1.54	3.5	
16.	: 103.	2.39	5.25		4.5:		3.93	5.27	3.5	2.1:		4.52	3.50		.8.
32.	: 108	2.70	6.43		7.2:		3.76	7.23	3.5	.7:		2.88	7.82		
4.8		2 10	4				000					000			

LEAST SQUARES FITTED DATA

m -	"	••	••	••	••	••	••	"	"	••	••	
\$16E (DEG)	1.8	1.7	1.6	1.5	1.4	1.3	1.3	P.	.0	00.	00.	00.
SIGA (DEG)	5.9	5.4	4.9	4.4	4.0	3.6	3.4	BU*100	3.616	9.636	22.600	11.300
TEMP (C)	.36	+9.	1.19	2.23	4.07	6.82	8.30	DTH/D2	.2747	.2501	.2011	.0175
WS (W/S)	1.53	1.79	2.08	2.43	2.84	3.31	3.62	20/00	.1077	.0628	.0367	00000
• •		••	••	••	••	••	••			••	••	••
SIGE (DEG)	9.9	4.8	3.6	5.6	1.9	1.4	1.2		00.	00.	00.	00.
SIGA (DEG)	6.2	5.8	5.3	6.4	4.6	4.2	4.0	BU*100	2.331	6.634	16.443	39.079
TEMP (C)	2.32	2.54	2.97	3.77	61.5	7.23	8.23	DTH/02	.2156	1961.	1451.	6110.
(W/S)	1.81	2.03	2.29	2.58	2.91	3.27	3.51	ZG/NG	0160.	.0512	.0288	0862
		••	••	••	••	••				••	••	••
SIGE (DEG)	1.4	2.0	2.7	3.6	6.4	6.7	8.0	7.1	00.	00.	00.	00.
\$ 16A (DEG)	24.2	23.7	23.2	22.7	22.2	21.8	21.5	BU*100	4.872	11.737	24.502	59.671
TEMP (C)	2.55	2.74	3.11	3.80	10.5	6.72	7.50	DTH/DZ	.1865	.1683	.1318	.0831
(N/S)	66.	1.21	1.47	1.90	2.20	2.69	3.03	20/00	.0993	1090.	1760.	.0050
		••	••	••	••	••				••	••	••
HEIGHT (M)	1.0	2.0	6.4	8.0	16.0	32.0	48.0		4.0	8.0	16.3	39.2*

<	•
AT	,
C	2
П	Ī
0	5
4	,
0	
u	j
â	7
9	Ċ
-	۰,

**	**	**	••	••	•• •	•	••	••			.8	02:	1:		20		••	••	.4:	3.2:	.7:	.0	-	••	-		••	••	••	••	••	••			••	••	••
00:0					11				1.17		113.	1.0502	10	3016	(DEG)									SIGE	(DEG)	4.1	3.5	3.1	2.7	5.4	2.1	1.9	1.	00.	00.	00.	00.
TIME 03:00:00		0.0	-5.5	50	TOTL	Ī	12. =d	MW/CM2	.48(16M)	COBSERVED	92 (16M)13.48	0783 (16M	1000		(DEC)	2	9 6.7			9 5.2				SIGA	(DEC)	5.4	5.6	5.9	6.1	4.9	6.7	6.9	001 ± 08	1.177	.056	7.427	.738
	THER		DEG	E	IH	014	19	-7.26 MM	(8M)			8M1.	1		3	-1.4		'				3 2.26		TEMP	3	-1.44	-1.33	-1.13	+1	00	1.24	2.18	DTH/DZ 8	1 7601.			
E 05/04/77	WE		H POINT	3	OIW		9 90.	•	1 .18	.192M1	-				S/W)									MS	M/S)	!		2.32 -			4.08	4.55	TO 20/00				
DATE			DEW	VISI	101	5	A=		4 4 M	(39	(4M)	( 4 M )	15	•	OEC		89	82	86.		109	133			-								DO	1.	0.	0.	0:
: 00:0	* 12.0	* 050 %	•			•	•	••	: 96.	-				316	(DEG):		••		2.4:	1.0:	.5:	1.0:		SIGE :	: (930)	: 6.9	4.5 :	5.9 :	1.9 :	1.2 :	. 8.	: 9.	RI :	. 00.	: 00.	: 00.	: 00.
TIME 02:00:00		9.0	-5.0	50		H	P= .43	MW/CM2	.48( L6M)	( OBSERVED	01 (16M)	0674 (16M)		0	(DEG)	3				7.2 6.				SIGA	(990)	7.6		5.9		3.5		2.4	8U*100	3.726	.810	.402	.783
	WEATHER	TEMP DEG C	r DEG C	E W	Ŧ	OIW	63	-7.26 MM	(8M)	. 48	(8M)	(8M)			(0)	03		1	11 .53	-	9			TEMP	3	46	26	•15	+6.	2.41	4.97	10.7	70		1985 7	_	
DATE 05/04/77	3	里	3	ISIBIL	MID		36 B		4M) .23	39.192M)	-	4M) 0775			(X)				5. 2.41		5	4		M.S.	(N/S)	66.	1.33	1.79	2.41	3.24	4.37	5.19	o zazna	!		. 9180.	
DA :			: DE	>	101	LOW .	: A=		+) :	-		-	1		: OEG		: 12	11 :		: 127.													0		•		:
00:0					1,0				2.74	0	172.30	0216		105	(DEG)				1.7		_			SIGE	(DEG)	1.7	9.1	1.4	1.3	1.2	1:1	1.0	8.1	00.	00.	00.	00.
TIME 01:00:00		0.0	•	50				MW/CM2	-	COBSERVED	1 97*(16M)72.30	095* (16M	, 1 '		(DEG)	00.		07 4.2		2.17 1.8				SIGA	(050)	4.6	4.2	3.8	3.4	3.0	2.7	5.6	80*100	4.004	9.717	21.137	
T 77/40/20	WEATHER	TEMP DEG C	POINT DEG C	I WI	MID HI	410	8=13	-7.26 M							(M/S) (C)		.37	1		2		3.29 7.	ATA	TEMP	(3)	53	26	.25	1.23	3.00	5.73	7.41	DT H/ DZ	.2592	-2386	2	_
DATE 05/		16	DEW POL	VISIBIL		1000	A=15		4M) . 2	61	(4M) 8 7				:(DEG) (M		129. 1					164. 3	FITTED DATA	S.M.	(M/S)	1.27	1.57	1.93	2.37	2.91	3.58	40.4	ZUZNO	1	.0822		.0113
		••	••	••			••		::						:							-		••	••			••		••							
						CLO HE (M)	EXPONENTS	NET RADIATION	RICHARDSON NO.		(1/1 1*10	USTAR			HE IGHT (M)	1.	2.	• •	88	16.	32.	48.	LEAST SQUARES		HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.3		4.0	8.0	16.0	39.2#

	1
	1
TA	
<b></b>	
AO	
0	1
	1
C	1
u.	1
>	
CBSERVED	
w	1
S	
8	1
C	1
	1

. 0	••	••	••	••	-:1	••	••	••	. 54 :	DATA! :	1.03:	225:	GE :	(DEC) :	"			3.3:	1.9:	:4.	.4.	
TIME 06:00:00		2.2	-6.7		TOTL		.29	2	16M)		[ (M91)	(16M).	IGA SI			7.1	5.8	4.3	5.6	5.9	1.7	
TIME	~			-	Ħ	2135 HI	=d 6	MW/CH	.16(16M)	_	.71	.1826	EMP S	(C) (DEG)	1.55	•10	00.	•59	1.29	3.84	91.5	
104/17	WEATHE	TEMP DEG C	INT DEG	VISIBILITY (MI)	MID 1	LOW MID 213	8=-1.2	-7.26	05 (8M)	(39.192M)****	25 (8M)	(4M).2140 (8M).1826 (16M).1225	WS T	(N/S) (				4.06				
DATE 05/04/77		-	DEW PO	VISIBI	MC	MO.	1=42		. (M4)	39.192	(M)	[4M).21	WD					115.				
••		••	••	••	0:10	-			.36 :	ATAI:	1.42:	1143:	16E :	(DEG): (DEG)				1.7:				
TIME 05:00:00		-0-1	-5.0	0	TOTL	Ħ	.50	M2	( W91 )	ERVED D	(16M)	(164)	SIGAS	066) (		10.7	8.4	6.2	4.2	1.9	2.1	
	ER	. 29	0 0	MI) 2	Ħ		=d 09	19 MM/C	11 .13	5 (08S)	14. (1	11.1265	TEMP	(0) (0)	-1.00	-1.11	86	24	.22	1.82	5.14	
DATE 05/04/77	WEATHER	TEMP DEG C	OINT DE	ILITY (	MID	MID	8 8=	-7.2	.05 (8M	): (39.192M) .75 (DBSERVED DATA): (3	.23 (8N	(4M).1203 (8M).1265 (16M).1143:	M.S	(N/S)		1.34	1.93	2.52	3.40	5.31	6.93	
DATE 0			DEW P	VISIB	MO-	LOW	A=5		( th)	(39.19	( H )	(4M).1	O.			142.	133.	129.	132.	128.	134.	
: 00:	••	••	••	••	0		••	••	: 64.	DATA):	2.56:	14 (10M).1045:	SIGE :	(DEG): (DEG)		••	••	4.0:	2.5:	:6.	1.4:	
TIME 04:00:00		-1.7	1-9-	20	TOTL	H	44.	/CM2	21(16M)	BSERVED DATA):	1 (164)	4 (10M)	SIGA	(DEG)				6.8	4.3			
				_	H	0	-76 P=	26 MW/(	M) .2	0	-	.12	TEMP	3	72	71	96	40	.54	3.58	5.40	
05/04/7	WEAT	TEMP DEG C	DEW POINT DEG (	VISIBILITY (MI	MID	MID	38 8= -	-7.26 MW/	(M8) 60.	(39.192M)****	.57 (8M)	(4M).1270 (8M)	S.M.	(N/S)		1.66	2.10	2.72	4.18	5.97	6.02	
: DATE 05/04/77			DEW	ISIA :	*FOM	LOW	. A=				( M+)	. (4M) .	OM :	: ( DEC )		121.	1113.	110.	115.	. 120.	137.	
								NOI	NO.													
					CLD (TENTHS	CLD HT (M)	EX PONENTS	NET RADIATION	RICHARDSON NO.:		(1/1) #10	USTAR		HEIGHT (M)	1.	2.	4.	8.	16.	32.	48.	

DATA
FITTED
SOUARES
LEAST

HEIGHT (M)		(M/S)	(C)	(OEG)	S16E (DEG)		(M/S)	3	(DEG)	(DEG)		(N/S)	(C)	(DEG)	(DEG)
1.0		1.18	1	-	18.7		.92	99	18.0	6.9	1 .	2.1%	**	6.6	52.2
2.0	••	1.60	16		11.11		1.31	95	12.1	4.5	••	2.68	.50	7.4	21.4
4.0	••	2.17			6.5	••	1.85	84	8.1	3.0	••	3.29	.62	5.5	8.8
8.0	••	2.94			3.9	••	2.63	59	5.4	2.0	••	4.03	06.	4.1	3.6
16.0		3.99			2.3	••	3.73	. 08	3.6	1.3	••	46.4	1.55	3.1	1.5
32.0	••	5.42			1.4	••	5.29	2.10	2.4	6.	••	6.05	3.22	2.3	9.
48.0	••	6.48		3.2	1.0	••	6.48	5.04	1.9	.7	••	6.82	5.39	1.9	*
		00/00	DU/02 DTH/02	BU*100	8.1	-	20/00	DTH/02	80*100	RI	-	20/00	DTH/02	80*100	2
4.0		.2242	.1323	1.623	.00	-	.2203	.0689	1.154	00.	-	.2244	.0773	604	8
8.0	••	.1522	.1369	3.639	00.	••	.1562	.0867	2.885	00.	••	.1375	1180.	1.226	.00
16.0	••	.1033	.1463	8.405	00.	••	11107	.1223	8.076	00.	••	.0842	1901.	3.991	00.
39.2*	••	1600.	.1237	18.688	00.	••	.1012	.2175	32.478	00.	••	0019	.0925	12.732	00.

•	¢	1
١		
	•	
(	2	3
1	=	2
	1	
	2	
	3	
١	1	
٠	,	3

2. 8. 32. 48.							144.		77.	5.94 5.		.3: 13	136. 132. 132.	3.90	9.66 6. 9.38 6. 9.18 6.		7.8:
SQUARES		FITTED DATA	ATA		A 1 5	1910	3		TEMP	S 164	Sige		3	F	SIGA	\$ 16F	iu
HEIGHT (M)	: ::	M/S1	50	-	_	E G	CM/S	2)	50	(DEG)	(DEG)		(M/S)	50	-	-	
1.0		1.83	1.71	9.	8 1	2.6 :		9 69	6.86	9.6	4.9		2.99	10.51	13.0	4.8	
2.0		2.24	1.67	8	2		2.8		18.9		5.5		3.18	10.	11.	5.3	**
		2.73	1.62	7.	4		3.6		. 72	8.0	5.4		3.38	9	6	5.7	••
8-0		3.34	1.52	, 9			3		.56	7.3	5.7		3.60	10	8	6.3	••
		07	1.45	2 (					20	4.7	0.4		2.83		1	2	•
		500	1.1	0 '	0 0		0.0		670		0.0		0000	•	•		• •
32.0		5.59	2.53	t t	T 15		2.4	07 5	5.98	2.8	6.0		4.27	9.25	6.0	7.9	• •
	700 :		DT H / 02	80*			za/na	10	1				Z0 / NO	PT	BU*	R. I.	"
4.0	11.	1831 -	0150	114		02 :	.0821	1032		-194	03	.	9690	0531	256	07	1"
	:	. !	2000	•						637	3 .		02.50	0530	74.0		
8.0	-	1	1400.	084		. 10	.044	i		537	23		03 10	0438	1.144	17	••
16.0	•0•	.0682	17	.976		. 00.	.0241	i	- 1410	.988	-1.17		1610	0253	-1.531	-1.77	••
2*	.00		1890.	12.48		: 00	.0250	•		999.	00.			0025	804	81	••

THE DISC.   15-4   THE   1:00:100   Date   25/04/77   THE   2:00:100   Date   2:00:100		••	••	••	••	••					• ••	••	!		! "	••	••					! !	••		!	••	••				!	!	••	••	••	••	!
Tem District   Tem	0								7	. 3	48	37	36	103				9.	-	5.5	8.		36	5						- ~			0	80	+	0	
The Table of Section	0:					_			=		17	.23	15	0				-	7	=	=		SIC	DE		2.	-					= 1	=	.8	.8	-	
The control of the	00					10			1	- 6	Î	=	!			1	8	3	6	2	3			Ξ	12	7	~	7 -	-	-	1		1	1	-2	28	
The control of the	2:		1.	0			10	,	7	0 4	16	16	SA	6		2.	4.	6	2.	-	6		4	-							1	01				1	
THE FORCE   THE   13:00:00   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0	Land of		91	7	2		I	- 2	7	100	-	-	SI	DE		2	m	~	2	-	-		16	EG	4	.5	.3	6.	:0		1	2 !	17	04	37	15	
THE FORCE   THE   13:00:00   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0	E				00			1	200	000	42	01		~	1-	6	2	5	-	0			S	0	45	36	31	26	20	18	1	5 !	9.	6.	4.	4.	1
THE FORCE   THE   13:00:00   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0   10.0	=		U	U	-	H		3		: 5		23	I	_	10	0	-	.2	-						!						1	8	'	-	4-	8	1
THE FOLK   THE		ER	0	0	Y		9	,		- *	-	-	TE	2	191	16	15	15	15	14	14		T	-	9	1	5	~		2	1	7					1
The continue of the continue	17	F	DE	_			2	• "		0	8	8											TE	5		-	9	4.		. 4		9 1	81	0	9	94	1
The continue of the continue	3	EA	٥	-	7	0	Σ					_	2	S		93	2	13	20	40	45				15	5	15	5 5	7	1 2	1	E	0	0	02	8	
SATE OF ALT THE 10:00:00   DATE 05/04/77 THE 11:00:00   DATE OF ALT THE 10:00:00   DATE OF ALT THE NEATHER   NEATH	0		E	NIC	2	Σ	22		ď		20	0	3	E		-	7	2	2	2	N									_	1	-	·	i	i	i	
DATE 05/N/17 TIME 10:00:00 : DATE 05/N/17 TIME 11:00:00 : DATE 05/N/17 TIME 10:00:00 : DATE 05/N/17 TIME 10:00:00 : DATE 05/N/17 TIME 10:00:00 : DATE 05/N/17 TIME 10:00 : VISIBILITY (HI) 05 C -1.0	0		-	d	8	-		,	-	- 0	4	2											S	12	8	6	0	16	7 6	4		2	=	8	88	2	
TEAP DEC   13.9   TEAP DEC   13.9   TEAP DEC   15.7   TEAP DEC   13.9   TEAP DEC   15.7   TEAP DEC   13.9   TEAP DEC   15.7   TEAP DEC	ш			3	S				=	-	=	=		3		:	. 7							E	-	-	2	n' c	10	10	i	5	33	=	õ	00	
TEMPORE C   13.9   THE   10.00.00   THE   10.00.00   THE   10.00.00   TEMPORE C   13.9   TEMPORE C   15.7   THE   10.00.00   TEMPORE C   15.7   THE   10.00.00   TEMPORE C   15.7   TE	A			0	>	3	0 1		7	7	4	4	3	DE		61	61	18	18	18	17										i	0	•	•	•	•	
The control of the						_								-																	1	!					
TEMP   STATE						-			a	0 3	10	34	w	3	1				.5		•		ш	-							1	1					
TEMP   STATE	18									: +	. 5	61	101	DE	1			13	17	19	22		16	EG		.5	4	- 4			1	- 1	19	53	39	95	
TEMP DATE   TIME   10:00:00   DATE   55/04/77   TIME   TEMP DATE   WATHER	0					ニ			-		_	-	10	-	!					1			S	0	1	6	=	13	2 5	22		~ !		-	8	3	
TEMP DATE   TIME   10:00:00   DATE   55/04/77   TIME   TEMP DATE   WATHER	13		-	0			0		1	5 6	6 C	9	4	-	!			.6	.2		.5				!						1	1		1	1	9-	
TEMP DATE 05/04/77 TIME 10:00:00 : DATE 05/04/77 TEMP DEG	=		5	-			I C		2	2 2	2	=	16	EG	!	38	37	5	44	33	43		GA	9	-	2	6	m o	0	4 4	1	8 1	_	-	-	2	1
TEMP DATE 05/04/77 TIME 10:00:00 : DATE 05/04/77 TEMP DEG	ш			•	8			-	5	70	3 6	9	5			_	_		_			1.1	SI	OE	80	8	8	6 0		9		*	85	48	0.5	7	
TEMP DATE 05/04/77 TIME 10:00:00 : DATE 05/04/77 TEMP DEG	É					=	ď	-		• 0		6	4		Ö	3	50	25	=	95	65			-	-	.,	m .	., .	1 4	. 4	1	8	i	2	5	6	
TENTHS   DATE 05/0*/77 TIME 10:00:00   DATE 05/0*/77   TIME 10:00:00   DATE 05/0*/77   TIME 10:00:00   DATE 05/0*/77   TIME 10:00:00   DATE 05/0*/77   TIME 10:00:00   DATE 05/0*/77   TIME 10:00:00   DATE 05/0*/77   TIME 10:00   DATE 05/0*/77   DATE 05/0*/72   DATE 05/		2			-	-	1				1	:	Ē	2	5	5	*	4	*	3	2		4			00		N .	- ^		1			•	'		
TEMP DEG C	17	I	DEC	DE	-		2	• 1	- 3	E	2	8 W								3	7		E	2	6	.8	-			-	i	0	=	13	37	81	
TEMPO	7	A	4		7	0	Σ ,		-	ĭ			2	S		69	18	89	90	13	22				14	14	4	4 4	2 .	13	i	H	050	40	02	00	
TEMP DEG C	1	3	Z	Z	"	7	25 B	)	-		48	57	3	¥		-	-	-	2.	2.	2										1	0	•				
TEMP DATE 05/04/77 TIME 10:00:00 : DATE	0.5		-	PO	81	_	50	,	-	- 0	3.6	18	!		!								S	5	29	69	19	000	20	22	1	7	_			9	
Temp Date   Da	u			7	S			•	_		:-	-	1	-	!								3	=	::	:	-	-,	, ,	2 ,	1	21	36	61	01	0 2	1
TEMPO   TEMP	TA			DE	7	3	S 11		7	7 0	14	7	1 3	EG	!	17	14	05	90	8	8			-							1	3 !	0	0	0	0	
TEMP DEG C  OEW POINT DEG C  VISIBILITY (MI) HT (M)	-					1	_ <					_		-		~	~	~	2	~	N	1									1						
TEMP DEG C  OEW POINT DEG C  VISIBILITY (MI) HT (M)										. :	8	23		3		•	•	=	6	5	-						••		•	• ••	1	" !	••	•	••		
TEMP DEG C  OEW POINT DEG C  VISIBILITY (MI) HT (M)	2					_			7	n F		31	9	DE(				-	~	6	0		9	9	3	0	0	• -	. 4	3	i	_ !	7	+3	16	8	
TEMP DEG C  OEW POINT DEG C  VISIBILITY (MI) HT (M)	0					1			1	2	1	:	0	=							. 4		S	0	4	5	5	0 0	0	2	i	~		:	:	2	
TEMP DEG C  OEW POINT DEG C  VISIBILITY (MI) HT (M)	0		6	1		10	-		1	2 0	S	E	V	-		-	0	6.	6.	.2											1	1	0		1	•	
TEMP DEG C  OEW POINT DEG C  VISIBILITY (MI) HT (M)	12		3	0			I C		14	2 2		=	16	EG	!	15	14	12	=	6	8		GA	3	2	7	2	0	, ,	0	1	8!	2	-	9	2	
TEMP DEG C  OEW POINT DEG C  VISIBILITY (MI) HT (M)	u		_	1	85			-	5	0	1	0	10	0	! .								SI	DE	8		*	ic		00	1	* !	32	97	0	72	1
TENTHS)  (TENTHS)  (TOWN  (TENTHS)  (TOWN  (TENTHS)  (TOWN  (TENTHS)  (TOWN  (TOW	1 -					=		3	1		. 2	15	1 0		26	97	29	25	8	68	45			-	1 -	-	-		•		1			i	2	-	
TENTHS)  (TENTHS)  (TOWN  (TENTHS)  (TOWN  (TENTHS)  (TOWN  (TENTHS)  (TOWN  (TOW	-	0			=	+	~	•	- 1	7	13		T.	2	3	7	7	7	7	-	=		0				_				1				'	'	
TENTHS)  (TENTHS)  (TOWN  (TENTHS)  (TOWN  (TENTHS)  (TOWN  (TENTHS)  (TOWN  (TOW	1	H	DEC	DEC	-		9	. 0	0 3	2	N.	M	-										E	5	6	8	2	4 0	2	5		70	4	35	39	4	
(TENTHS) : LO HT (M) : L NEADIATION : RADIATION : (1/L)*10 : (1/L)	1	A	0	-	7	0	Σ ,	u	, -	-	•	=		3		96	7	12	23	29	22	4			12	71	2	2	: =		i	E	35	340	328	00	
(TENTHS) : LO HT (M) : L NEADIATION : RADIATION : (1/L)*10 : (1/L)	2	E	M	Z	Ξ	Ξ		2	0	7	20	86	3	2		2.	3.	3.	3.	3.	3.	A									i	0	•	-	:	-	4
(TENTHS) : LO HT (M) : L NEADIATION : RADIATION : (1/L)*10 : (1/L)	05		-	00	81		0			. 0	2 .	30		-									S	S	06	40	18	40	2 4	17	i	7					1
(TENTHS) : LO HT (M) : L NEADIATION : RADIATION : (1/L)*10 : (1/L)				3	SI		1	•	-		: -	:	1	_	1							E	3	¥	2	3.	3			9	1	21	64	26	13	10	•
(TENTHS) :L HT (M) NENTS RADIATION : ARDSON ND.: 1/L)*10 57AR :: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	AT			DE	7		0 1		7	10	4	7	19	EG	1	9	26	53	25	24	24	=		-							1	31	0	0	0.	0.	ED
(TENTHS) HT (M) NENTS RADIATION ARDSON NO. 11/L) #10 STAR 10. 2. 4. 8. 16. 32. 48. 16.0 32.0 48.0 16.0 32.0 48.0 16.0 32.0 48.0	•					2			•			-		0	!				-	-	-										1	- 1					1 2
TENTHS  HT (M)  NENTS  RADIATI  AR BSON  1/L) *10  2.  4.0  8.0  1.0  2.0  4.0  8.0  1.0  4.0  8.0  1.0  1.0  2.0  4.0  8.0  1.0  1.0  1.0  1.0  2.0  4.0  8.0  1.0  1.0  1.0  1.0  1.0  1.0  1		••	••	••	••	••		• •			• ••	••		••		••	••	••	••	••	••	ES	**			••	••	••••	• •	• ••	1	"	**	••	**	••	SE
AR D S S S S S S S S S S S S S S S S S S						-		0	2 2	2	_			=								A		=							1	1					0.9
AR D S S S S S S S S S S S S S S S S S S						THS	₹	, ;	7 2	3	110			5								9		-	_	-	_	-			1		_	_	_	*	*
HEIGH HEIGH						Z	= 1		100	2	-	K	1	F	-		4	8	9	32.	8			=		5.0	•			3 . 0			0.4	3.6	5.6	9.0	
1777 H						E	= 4		40	X.	7	ST		16					_	**1	•	1S		16	-		4	-	- "	4			4		7	3	
THE TAKE THE THE TAKE								)	- 1	5	-	)	!	H								9		H							1						
	!					CL	כר	1	1	Z X			1		1																1	1					

					٨	OBSERVED DATA	BSE	0 *
9:	-0062	. !	00.	1.879	.0031	0031	"	39.2*
10	0100.	••	-2.08	-1.778	0148	.0132	••	16.0
10	.0021	••		855	0253	.0249	••	8.0
02	.0041	••	05	290	0306	.0470	••	4.0
DTH	20/00	••	RI	80*100	DTH/DZ	20/00		
	1.72			55.8	15.	2.95	••	48.0
	1.71	••		55.6	15.	2.85	••	32.0
	1.70	••		55.4	15.	2.69	••	16.0
15	1.68	••	21.2	55.2	15.66	2.54	••	8.0
	1.67	••		54.9	15.	2.39	••	4.0
	1.66	••		24.7	15.	2.26	••	2.0
	1.65	••		54.4	15.	2.13	**	1.0
	(M/S)	••	(DEC)	(DEC)	3	(M/S)	••	IGHT (M)

											-					
	••	DATE 05	05/04/77	TIME 13	13:00:00	. DATE		1 77740750	TIME 14	14:00:00	••	DATE 0	05/04/17		TIME 15:00:00	00:0
	••		WEATHER	œ		••		WEATHER			••		WEATHER	ER		
	••		TEMP DEG	c 17.8	8		TEMP	MP DEG C	18.9	6	••		TEMP DEG	2 9	20.0	
	**	DEM PO	POINT DEG	v	7	. DEW	٩	NT DEG C	-1.4	4	••	DEW P	POINT DEG	<b>3</b> 9	-1.7	
	••	VISIBI	LITY (MI	8			SIBI	ITY (MI)	85		••	-	-	CHI	85	
		:LOW 2 MID	MIO		TOTL 2	*COM	m	•		TOTL	3:1		MID	Ï	2	TOT
CLO HT (M)	••	15	125 MID			. COM	198	OIN	H		••	3	30 MI		Ī	
EXPONENTS	••	A= .01	B=00	0 b= 0	8	. A=	II E		P= .0	1	••	A=02	8=	0	=	
NET RADIATION			43.89 MW/C					36.63	MW/CH2		••		m,	/ ME +	MW/CM2	
RICHARDSON NO	0.:	(4M) -	(H8) 14		1	-	1-48.6	(8M)	-150. (16M)		••	- (W+)	_	1-1-1	-1.12(16M)-2.35	-2.35
	••	(39.192	(39.192M)10.88 (08S	m .	ED DATA)		.19241	1.09	W				_		144	DATA
(1/1)*10	••	(4M)-1.28			(16M)-1.90		11-121-	(BM)		(16M)-238.	3.	(4M)-1.0	-			(16M)-1.55
USTAR	**	(4M).21		(8M).2199 (1	(16M).2185	5: (4M)		(8M)	.9255 (1)	(16M) 1.0654	554:	(4M) .224		8M) .2291		(16M).2309
	!	5	1	END CTCA	A 010E	3		127	210	A CICE		5	2		STEA	CICE
HEIGHT (M)		-	_	-		0:	-	20	(DEG)		-	-	-	3	(DEG)	(DEG)
	.		-	6.14				16.	35		!"	-		17.65		
	• •			. ,	4	- 205		27 14		0 89	•	326	2.33	17.46	27.1	
• •	• •	.007	1 67.7	7 15 11 51		. 202		10			• •	320		**		
	•	.007	,								• ;	25.7	0000	20001		
	••	275.	2		.3 22.8:				15.83 40.1		. 8 .	918.		10.87		12.0
16.	••	354.	<b>m</b>	15.51 53	53.7 19.4						16.5:	330.	16.2	16.68	27.7	
32.	••	284.	_		13.			2	30		-	320.		10.30		
48.	••	283.	7	4.98 54	.2 23.4	167 :	-	.71 15.	.30 34	.0 27	=	320.	3.37	16.08	22.4	22.0
LEAST SQUARES	RES	FITTED	DATA													
	••	MS		S			MS	TEMP	SIGA			MS	R	•	SIGA	SIGE
HEIGHT (M)	••	(M/S)	3		(DEG)		M/S)	(3)	(DEG)	(DEG)	-	(M/S)	(0)	-	DEGI	(DEG)
1.0	••	2.13		2	21.3		1.65	16.12	6.05	6.8	**	2.18			26.2	9.9
2.0	••	2.26		54.	21.3		1.66	16.08	47.3	8.7	••	2.35	5 17.29		25.8	8.1
4.0	••	2.39		54.	21.2	••	1.67	10.91	43.9	11.0	••	2.5			2.4	6.6
8.0	••	2.54	15.66		21.2		1.68	15.87	40.8	14.1	••	2.7.			54.9	15.1
16.0	••	2.69		55.	21.2	••	1.70	15.65			••	2.92			24.5	14.9
32.0	••	2.85		55.	21.2	••	1.71	15.38	35.2	5.	••	3.1		•	24.1	18.2
48.0	••	2.95			21.1		1.72	15.33	•	56.4	••	3.2	1.91 8	•	3.9	50.2
	-	20/00	DTH/02	BU*100	8.1	na :	20/00	DTH/D2	BU*100	R.		Z0 / NO	OTH/02		BU*100	R.I
4.0		.0470	0306	290	05	0.	0041 -	.0241	467	02	"	.0618	0436		369	01
8.0	••		0253	855	42		- 1200-	- 9610	-1.501	-114	••	.0332	0365			56
16.0	••	.0132	0148	-1.778	-2.08				-3.233	-1.50	••	.0179	1			-3.67
39.2*	••		.0031	1.879	00.		.0062	.0013	2.381	00.	••	.0200	•			.6.83
	-					-						-		-		

CBSERVED DATA

TEMP DEG	WEATHE TEMP DEG POINT DEG IBILITY (M 2 MID 1830 MID 1830 MID 1830 MID 1930 MID 19245 (8M) 1924) -2.12 19245 (8M)	C 19.1 C -2.8 C -2.8	••		WEATHER		
See   Poet   Poet   See   Se	TEMP DINT DISTRICTY 2 MID 1830 MID -0.08 B= 9.19245 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45 (6.1924) -2.45	ع د د د					
S	SIBILLITY 2 MID 1830 MID 1830 MID 1830 MID 1924 1924 1924 1924 1830 MID 1924 1924 1924 1924 1924 1924 1924 1924	00	••			18.4	
S	SIBILITY 2 MID 1830 MI 08 B= 9. 1-2.45 (6 192M)-2.	80	•	DEW P	DEG	C -3.3	
TENTHS   SLOW   2 MID	2 MID 1830 MI 08 B= 9, 1-2.45 (6 192M)-2, 1-6.46 (6 1.3182 (8		•	-	ILITY (MI)	•	
LOW   1830 MID	1830 08 B= 1-2.45 .192M)- 1-6.46	HI TOTL	TL 2::L	.OW 2		1	TOTL 2
NO.   A=07 B= .27 P= .09	4M)-2.45 39.192M)- 4M)-6.46 4M)-3182	Ŧ	•	1 107	1830 MID	H	
RADIATION: 10.89 MW/CM2  JARDSON NO.: (4M)09 (8M)28 (16M)59 : (4M)-2.45  JAYL)*10 : (4M)28 (8M)38 (16M)401 : (4M)-6.46  JAYL)*10 : (4M)28 (8M)38 (16M)402 : (4M)-6.46  SSTAR : (4M).3032 (8M).2948 (16M).2886: (4M).3182  Long the state of th	-2.45 192M16.46 -3182	r P= .03		A=10	8	60° =d	
### (4M)09 (8M)28(16M)59 : (4M) -2.45 : (39.192M) +*** (0BSERVED DATA): (39.192M)46 : (4M)28 (8M)38 (16M)40: (4M)64 : (4M)3032 (8M)38 (16M)40: (4M)61 : (4M)28 (8M)38 (16M)40: (4M)61 : (4M)61 : (4M)61 : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66) : (66)	-2.45 1924)- -6.46 -3182	MW/CM2	•		7.26	MW/CM2	
10   10   10   10   10   10   10   10	(8M) (8M)	7.87(16M)		- (W)		30( 16M)	
Ho   Ho   Ho   Ho   Ho   Ho   Ho   Ho	(8M)		_	(39.19	***		DA
T (M) : (0EG) (MS) (10M) 2886: (4M) 3182 (8  1.	(8H)		-12.1		( 8 H )	42 (16M)	1 53
T (M) : (DEG) (M/S) (C) (DEG) (DEG) (M/S)  10.75  10.75  2. : 342. 3.36 16.60 12.4 : 10. 2.56  4. : 340. 3.82 15.76 12.4 : 6. 2.80  8. : 331. 4.19 16.21 11.5 5.3: 360. 2.93  2. : 333. 4.47 15.90 10.3 7.4: 3. 2.97  8. : 337. 4.49 15.66 10.6 8.7: 360. 2.97  8. : 337. 4.49 15.66 10.6 8.7: 360. 2.91  8. : 337. 4.49 15.66 10.6 8.7: 360. 2.91  8.		.3322 (16M)	1.3381:	1. (M)	474 (8M).	1440 (16M)	1.1439
T (M) : (DEG) (M/S) (C) (DEG) (DEG): (DEG) (M/S)  1	SM	TEMP SIGA	SIGE :	QM	-	ENP SIGA	SIGE
1. : 342. 3.36 16.60 12.4 : 10. 2.56 4. : 340. 3.82 15.76 12.4 : 6. 2.80 8. : 331. 4.19 16.15 10.1 6.00 2.93 8. : 338. 4.41 16.15 10.1 6.00 2.93 8. : 337. 4.47 15.90 10.3 7.4: 3. 2.97 8. : 337. 4.49 15.66 10.6 8.7: 360. 2.81 8.	_	(DEC)	(DEG):(	: ( DEC)	(H/S) (C)	( DEG)	(DEC)
2. : 342. 3.36 16.60 12.4 : 10. 2.56 4. : 340. 3.82 15.76 12.4 : 6. 2.80 8. : 331. 4.19 16.21 11.5 5.3: 360. 2.93 8. : 337. 4.41 16.15 10.1 6.0: 6. 2.94 2. : 337. 4.47 15.90 10.3 7.4: 3. 2.97 8. : 337. 4.49 15.66 10.6 8.7: 360. 2.81 8. I SQUARES FITTED DATA  SQUARES FITTED DATA  I WS TEMP SIGA SIGE: WS TWO NO 16.25 11.9 4.3 : 2.64 16.00  3.33 16.43 13.1 2.9 : 2.64 16.00  3.54 16.41 12.5 3.6 : 2.69 16.00  4.00 16.25 11.4 5.2 : 2.81 16.00  4.00 16.25 11.4 5.2 : 2.81 16.00  4.51 15.82 10.4 7.6 : 2.93 15.00  4.51 15.82 10.4 7.6 : 2.93 15.00  5.00 10.10 81 : 00/02 0TH/02  1.00 10.10 81 : 00/02 0TH/02  1.00 10.10 81 : 00/02 -0026	17	.05			91	74.	
6. : 340. 3.82 15.76 12.4 : 6. 2.80 8. : 331. 4.19 16.21 11.5 5.3: 360. 2.93 8. : 337. 4.41 16.15 10.1 6.0: 6. 2.94 8. : 337. 4.47 15.90 10.3 7.4: 3. 2.97 8. : 337. 4.49 15.66 10.6 8.7: 360. 2.81 8.	2.56	88 20.9	••	44.	1.66 16	16.45 11.6	
8. : 331. 4.19 16.21 11.5 5.3: 360. 2.94 2. : 337. 4.41 16.15 10.1 6.0: 6. 2.94 2. : 337. 4.47 15.90 10.3 7.4: 3. 2.97 8. : 337. 4.49 15.66 10.6 8.7: 360. 2.81  SQUARES FITTED DATA  SQUARES FITTED DATA  (M/S) (C) (DEG) (DEG): (M/S) (C) 0 3.33 16.43 13.1 2.9 : 2.64 16.00 0 3.54 16.41 12.5 3.6 : 2.69 16.00 0 3.54 16.41 12.5 3.6 : 2.69 16.00 0 4.25 16.07 10.9 6.3 : 2.81 16.00 0 4.25 16.07 10.9 6.3 : 2.95 15.00 0 4.68 15.70 10.1 8.5 : 2.96 15.00 0 5.458 15.70 10.1 8.5 : 2.96 15.00 0 5.458 15.70 10.1 8.5 : 2.96 15.00 0 5.458 15.70 10.1 8.5 : 2.96 15.00 0 6.408 15.70 10.1 8.5 : 2.96 15.00 0 7.64 -0162 -0062 -0062 -0026	2.80	90 20	•	*0			
SQUARES FITTED DATA  SQUARES FITTED DATA  (M): (M/S) (C) (DEG) (DEG): 2.97  (M): (M/S) (C) (DEG) (DEG): (M/S) (C)  3.33 16.43 13.1 2.9 : 2.64 16.00  3.54 16.41 12.5 3.6 2.69 16.00  3.54 16.41 12.5 3.6 2.69 16.00  4.00 16.25 11.4 5.2 2.81 16.00  4.25 16.07 10.9 6.3 2.75 16.00  4.51 15.82 10.4 7.6 2.93 15.00  4.51 15.82 10.4 7.6 2.93 15.00  4.51 15.82 10.4 7.6 2.93 15.00  5.00 10.10 8.5 2.96 15.00  5.00 10.10 8.5 2.96 15.00  5.00 10.10 8.5 2.92 15.00  5.00 10.10 8.5 2.90  5.00 10.10 8.5 2.90  5.00 10.10 8.5 2.90  5.00 10.10 8.5 2.90  5.00 10.10 8.5 2.90  5.00 10.10 8.5 2.90  5.00 10.10 8.5 2.90  5.00 10.10 8.5 2.90  5.00 10.10 8.5 2.90  5.00 10.10 8.5 2.90  5.00 10.10 8.5 2.90  5.00 10.10 8.5 2.90	60. 2.93 1	.32	7.1:	34.	-		
SQUARES FITTED DATA  WAS TEMP SIGA SIGE: WS TEMP SIGA (M/S) (M/S) (C) (DEG) (DEG): (M/S) (M	6. 2.94	29	80			~	
SQUARES FITTED DATA  SQUARES FITTED DATA  TEMP SIGA SIGE: WS T (M/S) (C) (DEG) (DEG): (M/S) (C) (DEG) (DEG): (M/S) (C) (DEG) (DEG): (M/S) (C) (M/S) (M/S) (C) (M/S) (M/S	2.97		1		-	0	
SQUARES FITTED DATA    WS TEMP SIGA SIGE: WS TEMP SIGA SIGA SIGA SIGA SIGA SIGA SIGA SIGA	.09	.70 16	_	*6.	2.18 15	.66 9.0	8.4
SQUARES FITTED DATA  SQUARES FITTED DATA  WS TEMP SIGA SIGE: WS T (M/S) (C) (DEG) (DEG): (M/S) (C) (DEG) (DEG): (M/S) (C) (DEG): (M/S) (C) (DEG) (DEG): (M/S) (C) (DEG) (DEG): (M/S) (C) (DEG) (DEG): (M/S) (C) (DEG): (M/S) (C) (DEG): (M/S) (C) (M/S) (M/S			1		1		1
. WS TEMP SIGA SIGE: WS T (M/S) (C) (DEG) (DEG): (M/S) (C) (DEG):						5 A	
: (M/S) (C) (DEG) (DEG): (M/S) ( 3.33 16.43 13.1 2.9 : 2.64 16.5 3.6 3.76 16.35 11.9 4.3 : 2.69 16.5 11.9 4.3 : 2.75 16.5 11.9 4.3 : 2.75 16.5 11.4 5.2 : 2.81 16.5 11.4 5.2 : 2.81 16.5 11.4 5.2 : 2.81 16.5 11.4 5.2 : 2.81 16.5 11.4 5.2 : 2.81 16.5 10.4 7.6 : 2.93 15.5 15.5 10.70 10.1 8.5 : 2.96 15.5 15.5 15.5 15.5 15.5 15.5 15.5 15.		SIGA	SIGE :	MS	TEMP	SIGA	SIGE
3.33 16.43 13.1 2.9 : 2.64 1 2.5 3.6 : 2.64 1 2.5 3.6 : 2.64 1 2.5 3.6 : 2.64 1 2.5 3.6 : 2.64 1 2.5 3.6 : 2.65 1 2.6 1 2.5 2.6 1 2.5 2.5 1 2.5 2 2.8 1 2.5 2 2.8 1 2.5 2 2.8 1 2.5 2 2.8 2 2.8 2 2.8 2 2.8 2 2.8 2 2.8 2 2.8 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9 2 2.9		(056)	(DEG) :	(M/S)	(0)	(DEG)	(DEG)
3.54 16.41 12.5 3.6 : 2.69 1 3.76 16.35 11.9 4.3 : 2.75 1 4.00 16.25 11.4 5.2 : 2.81 1 4.25 16.07 10.9 6.3 : 2.87 1 4.51 15.82 10.4 7.6 : 2.93 1 4.68 15.70 10.1 8.5 : 2.96 1 : DU/DZ DTH/DZ BU#100 RI : DU/DZ DT	64 16	22.7	: 0.4	1.62	2 16.25	11.11	4.9
3.76 16.35 11.9 4.3 : 2.75 16. 4.00 16.25 11.4 5.2 : 2.81 16. 4.25 16.07 10.9 6.3 : 2.87 16. 4.51 15.82 10.4 7.6 : 2.93 15. 4.68 15.70 10.1 8.5 : 2.96 15. : DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/ : .07640162062 .00 : .0192026	.69 16.	21.4	: 6.4	1.72		10.4	5.3
: 4.00 16.25 11.4 5.2 : 2.81 16.  : 4.25 16.07 10.9 6.3 : 2.87 16.  : 4.51 15.82 10.4 7.6 : 2.93 15.  : 4.68 15.70 10.1 8.5 : 2.96 15.  : DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/  : .07640162062 .00 : .0192026	.75 16.	20.2	5.9 :	1.8		7.6	5.8
: 4.25 16.07 10.9 6.3 : 2.87 16. : 4.51 15.82 10.4 7.6 : 2.93 15. 4.68 15.70 10.1 8.5 : 2.96 15. : DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/ : .07640162062 .00 : .0192026	.81 16.		7.1 :	1.94	191	1.6	6.3
# 4.68 15.70 10.1 8.5 : 2.96 15.  BU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/  : .07640162062 .00 : .0192026	.87 16.		8.6 :	2.06	-	8.5	6.9
: DU/DZ DTH/DZ BU*100 RI : DU/DZ DTH/ : .07640162062 .00 : .0192026	.93			61.7	98.61	0.0	1.5
: DU/DZ DTH/DZ BU*100 RI : DU/DZ : .07640162062 .00 : .0192 -	.96 15.	4.	11.6	2.2		1.1	7.8
: .07640162062 .00 : .0192 -	DU/DZ DTH/DZ	80*100	RI :	20/00	DTH/DZ	BU*100	RI
	! "	191	. 10	.0368	0038	062	00.
- 8600. : 10	.00980223	614	: 60	\$610.	0034	961	08
0216008138829 : .0050 -	013	10	33 :	.0104	0025		04
.29878 :0100006		-3.876 -2	2.00 :	0019	0050	868-5-	1.89

					!					1					-
	. DAT	: DATE 05/04/77	TI TIME	NE 19:00:00		DATE	: DATE 05/04/77 TIME 20:00:00	WIL !	20:00		DATE	02/04/	: DATE 05/04/77 IIME 21:00:00	E 21:00	. 00:
		MEA	MEATHER				WEATHER	HER				WEA	WEATHER		
	••	TEMP DEG C	DEG C	16.7	•		TEMP 0		13.3			TEMP	DEG C	12.8	
	: DE	DEM POINT DEG	DEG C	-3.3	•	DEW	POINT		-2.8		DEW	POINT	DEG C	-1.7	•
	. VI	VISIBILITY (MI	(MI)	85	••	VISI	VISIBILITY (MI)		30		. VIS	BILITY	CHI	25	
CLD (TENTHS)	*COM	2 MID	Ħ	TOTL	2	*LOW	MID	Ŧ	TOTL	0	LOW.	ITOM WID HI	Ŧ	TOTL	.0 7.
CLD HT (M)	107 :	1830 MID	01	Ħ	•	LOW	LOW MID HI	0	H		FOM	I	LOW MID HI	H	
EXPONENTS	: A=	-77 B=	.82 P=		•	A= -	.93 B= -	-d +0	.15			.15 B=	-9 16.	61.	•
NET RADIATION	••	6-	-9.00 MW/C	CM2	•		-7.	.95 HW/	CM2			-1	/MH 09.	CM2	•
RICHARDSON NO.		(4M) 2.77 (8M) 7.09(16M)12.39	BM) 7.0	(M91)60	12.39 :	(4H)	4.10 (8	9.01(M	1 ( 16M)	87.07		4.52 (	(4M) 4.52 (8M)11.18(16M)18.24	8( 16M) I	. 8.24 :
		139.192M1 3	3.40 (085	SERVED	ERVED DATA):		.92M1 5.	40 (08:	SERVED	DATA		1924)	.30 (08	SERVED	DATA):
(1/1)*10	# (4M	) *****(W+)	8M)***	M91) **	(16M)*****:		(4M) ***** (8M) ***** (16M) *****	**** (W	# (16M	****		*****	***** (N91) ***** (N8) ***** (N4)	# (16M)	*****
USTAR	. (48	14M).0064 (	(8M),0030		0.0000	(4M)	(16M).0020: (4M).0074 (8M).0032 (16M).0020:	M).003	1191) Z	00000	(4H)	0055 (	(4M).0055 (8M).0026 (16M).0019	IN91) 9	: 6100.
	3	S.M.	TEMP	SIGA	SIGE :	Q	•	TENP	SIGA	SIGE	Q	SH	TENP	SIGA	SIGE :
HEIGHT (M)	: ( DEC)	( W/S)	3	(050)	(DEG): (DEG)	(DEC)	(M/S)	(C) (DEG) (DEG):(DEG)	( DEC )	(DEC)	( DEC)	(M/S)	(M/S) (C) (DEG) (DEG)	(DEC)	(DEG):
1.			13.91					9.11							
2.	: 46	72	14.69		•	183.	1.18	11.47			: 151	18.		17.1	
4.	: 38.		14.49	.3	•	173.	1.42	12.02	27.0		: 135.	1.30	10.48	5.9	•
.8	: 29	95			:4:	158.	1.69	13.61		5.4	135.	1.55			1.3:
16.	: 42	. 1.15				146.	1.73	14.46		4.3	: 133.	1.56			1.9:
32.	: 45	1.21	15.50			130.	1.88	14.94		2.8	133.	1.51			3.1:
48.	: 47	1.25	15.35			127	1.99	14.90		2.5	128.	1.78			3.0:

	••	MS	TEM	S	SIGE	••	MS	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE
HEIGHT (M)	••	(M/S)	3	(DEG)	(DEG)		(M/S)	9	(050)	(DEG)	••	(M/S)	3	(090)	(DEG)
1.0		.65		-:	1.		1.13	10.64	6.66	3.3		.87	8.46	9.7	.5
2.0		.74		.2	1.	••	1.25	10.96	52.3	3.2	••	66.	8.83	8.7	9.
4.0	••	.84		4.	.2		1.39	11.57	27.4	3.1	••	1.14	9.54	7.8	6.
8.0	••	.95		.1	4.		1.55	12.65	14.3	3.1	••	1.30	10.81	7.0	1.3
16.0		1.07		1.2	1.	••	1.73	14.34	7.5	3.0	••	1.49	12.73	6.3	1.9
32.0	••	1.21		2.0	1.2		1.92	15.76	3.9	5.9	••	1.70	14.13	5.7	2.1
48.0		1:31	15.24	2.8	1.7		2.04	14.58	2.7	2.8		1.84	12.26	5.3	3.3
		20/00	DTH/D2	BU*100	R.I.		20/00	DTH/02	BU*100	2	-	20/00	DTH/DZ	BU*100	12
4.0		.0347	6160.	7.605	00.		.0495	.2920	8.268	.00		.0510	.3396	14.567	00.
8.0	••	9610.	.0803	19.446	00.	••	.0275	.2412	21.997	00.	••	.0292	.2758	36.018	00.
16.0	••	1110.	.0450	34.008	00.	••	.0153	.1395	40.894	00.		1910.	.1482	58.792	00.
39.5*	••	.0025	90000	2.162	00.		6900	.0075	10.526	00.	••	.0169	-0025	4.944	000

Carlotte Carlotte	. 0.	DATE D	77/40/20	TIM	F 22:0	22:00:00	: DATE	1.77	77/06/77	TIME	23:00:00	00:	: DATE		77/40/90	TIME	00:00:00	00:0
						,												
	••		MEAIHER	TEK					MEATHER							×		
			TEMP DEG	J 9	1111			TE		J	6.7				TEMP DEG	2 5	9.6	
		DEM P	POINT DEG	ے 9	-1.7		. DEW	M POINT	NT DEG	J	-3.1		. DEW	M POINT		J	-3.3	
		VISIB	-	(IN)	25		: VI	SIBIL	ITY (MI	111 25	2		* VIS	181		CHI) 2	25	
CLD (TENTHS)	*F04	72	MID	Ħ	TOTL	ודר ס	.LOW	Σ	01	Ŧ	TOTL	0 7.	FON.		MID	Ŧ	TOTL	7.
CLD HT (M)		LOW	MID		Ŧ		" LOW		MID		Ŧ		. LOW		MID		Ŧ	
NEN	: A=	8	4 B=	65 P=	09.		: A=	28	4. =8	43 P=	.28		: A=	03	B= .5	50 Pa	.20	
NET RADIATION	••		1	N	/CM2				-7.1	MW/CM2	42		••		-7-18	B MW/C	I	
ON NOSURE DE		4M1	24 18M1		14		1 14M)	30*			61*(16M)	7.47	: (4M)	*27	•	-	90*( 1 AM)	7.08
The state of the s		0		2	CERVEN		-	. 0			CORSERVED	•	130	-			LORSERVED	
									13.07	L	-0.0	2000		•	'	-		
ULY LIVE		7 (WY)	C-13 (8M)	2000	M91) C	1 0761	E + 1	1 4.204	CWO XX	•	101	28.30	144	*8620	104 X	0315*	# VI *	0000
COLE		0.		000.		10/01	-	100		•	1011	. 0244		•			-	
Carl Christian		QM	S.M.	TEMP	SIGA	SIGE	9		T SM	TEMP	SIGA	SIGE	3	100 To	MS 1	TEMP	SIGA	SIGE
HEIGHT (M)	: ( DEG )	EG.)	(N/S)	3	(DEG)	(DEG):	9	100	1	-	DEG	(DEG): (DEG)	: (DEG	Ĭ		(3)	(DEC)	(DEG)
- 10 T - 183 A				5.74			1			5.00			-			3.51		-
: .		13		7 22			170			20 2	17 1		140	•	-	4 61		
•,			14.	67.0				•		2000				• (		100	•	
;	••		1.17	67.9						16.9	11.4				77.7	67.0	7.9	
<b>8</b>		.66	1.60	7.33	~	:6.4			2.75	7.97	6.2	2.1	: 172.		3.05	9.17	3.9	
16.		123.	2.82	8.77			: 183.			0.29	4.6	2.0				10.89	4.6	
32.		122.	4.39	9.95	3.8			3	.57	10.71	1.9	3.2				11.16	5.8	1.6:
<b>48.</b>	-	122.	69.5	10.56			110		14.	0.59	7.7	4.4				11.04	7.9	
L'EAST SQUARES	1	FITTED DATA	DATA				8											
		¥S.	TE	TEMP	SIGA	SIGE		SI	TEMP		SIGA	SIGE		N.	TEMP		SIGA	SIGE
HEIGHT (M)	••	(M/S)	1 (C)	•	DEG)	(DEG)		W/S)	(0)	•	(050)	DEGI		W/S)	3	•	DEGI	(DEG)
1.0		.54	4 5.85	15 7	4.6	17.5		1.39	5.42		.7	8.		1.63	4.48		6.5	.3
2.0		.81	1 6.07	77 4	4.4	11.2		1.69	5.78	12.9	6.	1.0		1.87	4.99		6.3	*
0.4		1.23		18 2	8.4	1.1		2.04	6.47		9.	1.4		2.14	5.95		6.2	9.
8.0		1.86		-	3.8	4.6		2.47	7.71	8.7	.7	1.8		2.46	7.68		0.9	
16.0		2.81			7.7	5.9	••	3.00	9.66		.2	5.4		2.85	10.36		6.9	1:1
2		4.26		1	4.3	1.9		3.63	11.43		6.	3.3		3.23	12.55		5.7	1.6
48.0	••	5.4	3 10.49	64	3.1	1.4		4.06	10.35		.3	3.9		3.50	10.52		2.1	1.9
		20/00	0TH/02	BU	*100	R I	na :	00/00	DTH/02	80*100	90		. 00	20/00	DTH/02	1	BU*100	
																		-

8888

5.621 13.954 23.706 1.448

.45% .3773 .2127

.0980

8888

4.466 10.090 16.310 1.067

.3320 .2763 .1650

.1312 .0795 .0481 -.0062

8888

7.731 11.807 14.795 10.330

.2075 .1821 .1314 .0481

.1745 .1321 .1000

8.0 16.0 39.2 1

CBSERVED CATA

	•	4	Į
		۰	
	•	c	ι
	(		١
	1		3
	ı	1	ı
		5	
		2	
	ı	1	J
		,	
	-	1	3
	•	-	١

	2 : A ! : 76 : 76 :	E	**	••		.5	.5:	.4:
23:30:00 4.5 10TL	.72 DATA) 11 5.37	SIGE (DEG)						
2.2 -4.5 20 10 11	8 MW/CM2 1 .38(16M) .72: 1 (CBSERVED DATA): 1 3.16 (16M) 5.37: 1.0749 (16M).0676:	TEMP SIGA (C) (DEG)		24.	22.4	13.4	4	4
1 5 T	.386 CBSE CBSE	8 0	57	52	1.53	23	.29	99
HER CEC C	1 2 2 2 6 0 .	TEN (C)	i	·		2	4	•
DEW POINT DEG C VISIBILITY (MI) LOW MID H	: (4M) .19 (8M) .38(16M2): (59.192M) 4.71 (CBSERVE)?: (4M) 1.80 (8M) 3.16 (1622): (4M) 0.800 (8M).0749 (1622)	WS (W/S)		1.22	1.88	.82	.93	84.
1811	192N 192N 1.8							
LOW VE	4 4 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	WD DEG)		152	158	141	137.	145
	57: 22:	SIGE: WD	••	••		1.1:	:0:	:6.
)1-L	2.6 DAT 1)67.			_				
12.2 2.2.2 1.5 1.5	12 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	SIGA (DEG)		15.0	8.0	7	2.9	3.1
2	MW/CN 1.31 (08SE 33.73 0324	TEMP (C)	42	10.	1.34	90	68	118
	7.18 P (8M) 1 2.04 ( 8M) 33	TE C		-	- ~	, m	80	6
DATE 06/04/77 TEMP DEG C	(4M) 2.192M) 1.07* (8M) 1.03* (16M) 5.05 : (4M) .57 (8M) 1.31(16M) 2.65 : (4M) 3.3648M) 21.1* (16M)****** (4M)13.50 (8M)33.73 (16M)67.57: (4M).107* (8M).058* (16M).0136: (4M).0489 (8M).0324 (16M).0222:	WS (M/S)		1.36	7.37	3.44	3.47	3.82
SIBILI	192							
LOW VIEW	46.44	MD (DEG		153	155	149	139	129
0	05 : TA): ***:	SIGE: WD (DEG):(DEG)	••	••		6		1.3:
3.2 4.5 TOTL	D DA			8	<b>~</b> α	6	0	0
	M2 (16M (16) (16)	SIGA (DEG)		•	4.4 C	: -	2.	3.
HI SO TI	83 MW/C 8M)1.03* 04 (08S 1M) 21.1:	4	84.8	.15	2.88	.73	.84	90.01
œ H	88.3 88.3 88.3 88.3 88.3	E C	3					
CATE 06/04/77 T WEATHER TEMP DEG C DEW POINT DEG C VISIBILITY (MI) OW MID H	27 * ( #) 1 7 * (	WS (M/S)		1.69	2.65	3.75	3.61	3.16
S 4 0	27* .192M) 192M)							
5 5 5 B		: WD		143	139.	137	133	134
	NET RADIATION : RICHARDSON ND.: (1/L)*10 :					••	••	
NTHS (E)	RADIATI HARDSON (1/L)*10	-	1:	2.	• •		32.	48.
CLD (TENTHS)	NET RADIATION RICHARDSON NO (1/L)*10 USTAR	HEIGHT (M)				-	3	4
33	RIC	1						

LEAST SQUARES FITTED DATA

	•	MS	TEMP	SIGA	SIGE		MS	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE
PEIGHT (M)	-	(M/S)		-	(DEG)		(W/S)	3	_	(DEG)		(W/S)	3	(DEG)	(DEG)
1.0		1.88		7.4	. 7		1.17	.42	20.3	4.		.89	25	50.9	.3
2.0		2.14		5.9	1.	••	1.47	.74	14.6	• 5	••	1.24	07	33.4	.3
4.0	••	2.44		4.7	8.		1.84	1.37	10.5	9.	••	1.71	.28	21.9	4.
8.0		2.78	99.9	3.7	8.		2.31	2.57	7.5		••	2.36	16.	14.4	4.
16.0		3.18		2.9	6.	••	2.90	4.68	5.4	8.	••	3.25	2.27	4.6	4.
32.0	••	3.62		2.3	6.		3.64	7.83	3.9	1.0	••	4.49	4.59	6.2	.5
48.0	•	3.91		2.0	1.0		4.15	6.55	3.2	1:1		5.45	95.9	4.8	• 5
		Zu / NG	DTH/D2	81)*100	21		zazna	DTH/02	80*100	R I		20/00	DTH/DZ	80*100	1 8
4.0		.1073	.3447	3.254	00.		.1405	.3138	5.271	00.		.1866	.1831	3.607	00.
8.0	••	2190.	.2887	8.343	00.	••	1880.	.2857	12.148	00.	••	.1288	.1757	7.245	00.
16.0	••	.0349	1767	15.588	00.	••	.0552	.2295	24.620	00.	••	.0889	0191.	13.862	00.
39.5*	•	0281	.0238	10.874	00.	••	.0219	.0281	11.402	00.	••	.0344	1851.	31.882	00.
*	DBSE	OBSERVED DATA	4												
	Contract or other Persons	The same of the sa	Management of the latest designation of the				Secretarion of particular of column		NOTATION AND ADDRESS OF TAXABLE PARTY ADDRESS OF TAXABLE PARTY AND ADDRESS OF TAXABLE PARTY ADDRESS OF TAXABLE PARTY ADDRESS OF TAXABLE PARTY ADDRESS OF TAXABLE	MANAGEMENT SPECIAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 1997 AND ADDRESS OF THE PERSON NAMED IN COLUMN 19	Section and section is not as a second	A STREET, CONTRACTOR OF STREET, STREET			

<
-
4
C
C
u
>
a
u
5
a

		DATE 36/04/7/ 11	WIL !	ME 04:00:00	: 00:	DATE	DATE 06/04/77 TIME	TIME 1	05:00:00		: DATE 3	26/04/77	1 Line	06:00:90	: 00:
		WEATHER	HER		••		WEATHER	153		••		WEATHER	HES		•
		TEMD DEG C	FG C	9.0	••		TEMP DEG C	J 95	1:1	••		TEMP DEG C		-1.1	
•	DEW	DEW POINT DEG	FG C	-5.6	•	MIG	OLVI DE	. J 53	-5.6	•	DEW P	DINT D		1.9-	
	VISI	VISIRILITY (MI)	(IW)	20	••	VISIE	VISIBILITY (MI)	[MI] 20	0	••	VISIR	VISIAILITY (M!)	( M ! )	33	
	MOT:	GIW	H	TOTL		MO.	CIM	Ŧ	TOTL		*0	CIN	III	TOTL	:0 7
CLO HT (M) :	200	MID	0	Iн		* 10M	CIW		H	•	LOW	N	: LGW MID HI	Ŧ	••
EXPONENTS :	A= -	A=73 8=58 P=	.58 P=	.55	••	A=	A=25 8=44 P=	=d 55.	.52	•	A=6	- =8 6	.85 P=	.75	•
NET RADIATION :		-9-	-6.83 MW/	/CM2	•		-6.	.83 MW/CM2	M2	•		-9-	83 MW/C	,M2	••
RICHARDSCN NO.:	( M+)	.23 (BM)	•	2(16M)	: 41.	( 4 W )	.53 (8)	168. (1	(16M)	1.14 :	( M +)	.54 (8	49° (M	(16M)	: 69.
•	(39.		0	BSERVED DATAI:	DATA1:	(39.19	32M) 1.1	13 (085)	ERVED	DATA):	(39.19	9 1 MZE	92 (089	SEPVED	SATA1:
: 01*(7/1)	(4M)	4M1 2.61 (8)		1 (16M)	5.64:	1(44)	1.96 (8)	W115.88	(16M)	12.83:	(4m)15	3,45 18	C.6 (M	11641	4.41:
USTAR :	( 4H )	(4M).0524 (8)	18M) . 053	33 (16M).0529: (4M).0273 (8M).0262 (16M).0303: (4M).0165 (8M).0235 (16M).0382:	.0529:	(4M).	3273 (8	4).0262	(16M)	.0303:	(44)	165 (8	M) .0235	(16M)	.0382:
	GM :	N.S.	TEMP		SIGE : WD	MD	N.S.	TEMP		S16E :	CM	MS	TEMP		S16F :
HEIGHT (M) :(	: ( DEG )	(M/S)	(3)	(050)	(DEG):(DEG)	DECI	(M/S)	(C) (DEG)		(DEG):(DEG)	DEGI	(M/S)	(C) (DEC)		(DEG) :
# 5800 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		THE PERSON NAMED IN	.86					-1.25		•			-2.80		
2:	156.	68.	1.13	24.7	••	65.	.68	04	13.9	••	311.	14.	-1.69		•
4.	140.	1.16	1.24	50.9	•	71.	1.03	.55	0.6		352.	94.	79	10.8	•
8.	125.	1.62	16.1	10.8	3.8:	19.	1.34	1.33	0.9	2.0:	84.	1.03	00.	13.5	4.1:
16.	123.	2.68	3.15	4.2	2.2:	88.	1.88	1.98	7.5	2.7:	105.	1.95	94.	6.5	3.6:
32. :	135.	3.76	5.27	1.9	1.6:	.96	3.05	3.11	6.5	1.2:	120.	3.52	1.26	5.8	1.3:
84	149.	4.92	7.24	5.5	1.3:	107.	3.47	3.30	3.9	1.1:	138.	3.23	21.2	14.0	1.0:

LEAST SQUARES FITTED DATA

GE :	. 6		. 9	8			: 1			. 0		. 0
\$16E	27.	15.5	8	4.	2.	-	-	RI	0.	00.	0.	0.
SIGA (DEG)	89.6	55.6	34.5	21.4	13.3	8.2	6.2	P11* 100	28.971	35.355	34.834	30.390
TEN CC)	-1.89	-1.70	-1.34	66	.45	1.79	16.1	DTH/DZ	.1828	1592	.1120	.0637
WS (W/S)	.21	.36	09.	1.02	1.72	2.90	3.94	20 / NO	1011.	.0929	.0784	0181
		••	••	••	••	••				••	••	••
STGE (DEG)	6.3	4.6	3.4	2.5	1.9	1.4	1:1	1.8	00.	00.	00.	00.
SIGA (DEG)	14.0	11.7	6.6	8.3	7.0	6.5	5.3	80*100	12.585	20.980	26.874	11.358
TEMP (C)		36						0TH/02	.2094	.1788	.1175	6170.
WS (W/S)	.48	89.	86.	1.40	2.00	2.85	3.51	20/00	.1188	6480.	1090	.0263
		••	••	••	••	••				••	••	••
\$16E (DEG)	12.2	8.1	5.4	3.6	2.4	1.6	1.3	1 8	00.	00.	00.	00.
\$16A (DEG)	44.3	27.3	16.8	10.4	4.9	3.9	3.0	BU*100	6.310	11.445	20.135	39.136
TEMP (C.)		1.03						DTH/DZ	.1618	.1576	.1492	.1331
45 (M/S)	.56	.83	1.21	1.17	2.59	3.80	4.75	20/no	.1575	.1153	***	.0725
			••	••	••	••	••			••	••	••
HETGHT (M)	1.0	2.0	4.0	8.0	16.0	32.0	48.0	35-	4.0	8.0	16.0	39.2*

	: DATE 06	71140190	TIME 07:	07:00:00	: DATE	11/40/90	TIME 08:	: 00:00:80	DATE 06	11/90/90	TIME	00:00:60	••
		WEATHER				WEATHER		••		•			••
		TEMP DEG	J				J	••			c 12.8		••
	. DEM P	POINT DEG	J		3	0	J	•	3	0	v	•	••
	* VISIBILITY	ILITY (MI)	85		: VISI	IBILITY (MI	8	••	VISTBI	IBILITY (M	02 (1		••
181	*FOM	MID	H	TOTL 0	:	OIN	H	TOTL 0:1	LOW	MIO	Ŧ	TOTL	:
CLD HT (M)	. LOW	-	Ħ		. LOW	MID		•	LOW	MID	IH		••
EXPONENTS	: A=40	0 B=95	ä		: A=	15 8=30	90° =d 01	•	A=13	8	8 P= .06	•	••
NET RADIATION	••	.70	Ì			13.40	MW/CM2	· Back		25.40	MW/CM2		••
ARDSON NO.	. (4H) :	.16 (8M)	.35(16M)		( 4M)	-3.68 (8M)	-10.9 (16M)	1 -20.2 :	(4M)-6.	.48 (BM)	-19.4 (16M)		••
	: (39.192M)	2M) .63	( OBSERVED	ED DATA	: (39.192M)	92M1 7.03	(08SE	D DATAL:	(39.192M)	9	COBSERVED	ED DATA)	-
(1/L)*10	: (4H) 1.	-	2.79 (16M)	-		-	-14.3	ME13.3 :	(1- (N4)	-	-25.4 (16M)	-	3:
USTAR		(8M)	5			(4H).1726 (8H)	.1837	(16M),1763 :	(4M).13	-	.1493 (1	6M) .1437	13
	QM :	WS TE	TEMP SIGA	SIGE	9	HS T	TEMP SIGA	SIGE :	O.M	HS T	TEMP SIGA	A SIGE	! "
HEIGHT (M)		-	-		0:	_	-		-	-	-		-
1.	-		1.30				99.9			-	11.13		! "
2.	: 126.	1.27	_	0	: 187.	1.28	1.41 07.9		78.			.2	••
*	: 126.			9.5	: 183.	1.39	_		68.	1 46.	10.89 37.1		••
8.	: 117.					1.47		2 10.6:	70.				6
16.	. 118.					14.	6.03 10.3		84.			9	8
32.	: 125.		4.37 3				5.80 9.		105.	1.01	0.22 29.	9	=
.84	: 140.		4.76 3.3	.3 1.3:	1: 163.	.62	•	0	133.			.9 34.4:	+
LEAST SQUARES	S FITTED DATA	DATA				TE ST							
	SM :	TEMP	SIGA	SIGE	SM :	-	IP SIGA	SIGE :	MS	TEMP	P SIGA	SIGE	••
HEIGHT (M)	: (M/S)		-	(DEC)	: (N/S)		(DEG)	(DEG) :	(M/S	9	(050)	(DEG)	**
1.0	.86	6 1.10	15.9	51.6	: 1.	.26 6.71		22.5 :	.86	11.04	43.3	1:11	! "
2.0	+1.1 :	-		26.8			15.0	18.3 :	.90		39.5	13.5	••
4.0	1.51		1.6	13.9				14.8 :	.6.		36.0	16.4	••
	: 2.01		6.9	7.2	.1 .			12.0 :	86.		32.8	19.9	••
16.0	: 2.67		5.5	3.7				9.8	1.02	10.43	29.8	24.1	••
32.0	3.5		3.9	1.9		55 5.75		7.9 :	1.0		27.2	29.3	**
48.0	61.4	9 5.00	3.3	1.3				7.0 :	1.1	10.17	25.7	32.8	••
	20/NO :	DTH/DZ	BU*100	R. I	: 00/DZ	Z DTH/02	BU*100	RI :	20/00	OTH/02	BU*100	R.	
0.0	1451	.0918	2.293	8.8	0192	2 0389	-1.168	17	.0137	0351	-2.212	33	
0.0	0440		770			1	1000		1000	5070-	12 427	01.7-	
39.2*	0437	9760	10.790	30	2600.	5 - 1013	25.137	200	0000	***************************************	21.244	16.17-	• •
				,,,					****				•

*	
٠	
	-
4	2
	7
0	
-	-
u	
3	>
0	ŕ
20	-
č	

		••			••	••	••	**		!	••	!		••	••	**		**	!		••	!	••	••	••	••	••	••	!	!	••	••	••	!
00:0			חדר 0			69.4-	DATA	(16M)-3.08	1.3100	SIGE	(990)				10.3	11.5	13.6	14.8		SIGE	(DEG)	9.9		8.8	7.01	11.8	13.6	14.8	I a	13	19	3.57	3.14	
ME 12:00:00	21.0	85	170		- 5	2.19(16M)-	COBSERVED			SIGA	(DEG)			30.	27.	24.	25.2	19.		SIGA	DEGI		2.3	.3	9.	1.42	.8	9.	*100	426				
1	DEG C	(MI)	I	21 P=	I	1		11-2.89	8M1.309	TEMP	3	19.45	19.25	18.37	18.24	17.92	17.53	17.25		EMP	1 040					.92 2			1 ~					
	TEMP OF	>	MID		44.2	73 (8)	*	(M8) 16	-	N.S.	18/4		2.90	3.19	3 .45	3.60	3.73	3.80		TE	2	19	19	18	18	17	17	-	07470	0793	000	0396	0075	
DATE 06	DEW PO	-	,	14		44)	39.192	4M1-1.97	441.30	03	EG) (		165.		157.					N.	(N/S)		5.99	3.16	3.35	3.54	3.75	3.88	Z0/n0	.0602			+400.	
		••	O:COM			-	- :				0):(	-	-	-:	.3: 1	8	••	1:1							••	••								
00:00:11			TOTL			1-4-7	DATA!	41-3.09	_	10	( DE (			•	12	14	19	20		SIG	EG	6.7	8.2	10.0	12.3	15.0	18.3	50.6	3	24	3	4.6	36.74	
I ME 11:(	19.7	7.0	Ĭ ;	P= -4	/CM	.30116M	( DASERVED	3.03 (16M)	050	1 (7	(DEG)	37	45	+	6 45		23	21		SIGA	w					31.4			BU*100	779			3.798 -	
~	NT DEG C	TY (MI)	I	= .29	96.04	(8M)	40	(8M)	(84).	TEM	3) (5	17.	17.	16	10	16	.47 15.	15.		TEMP	(3)	17.21	17.14	16.99	16.72	16.27	12.11	15.78	207HT0			- 9520.	'	
TE 05/	DEM POINT	ISIBIL	IN O MO	=26 B		4M180	1924	4M1-2-14	4M1.1973	3 04			83. 1.	. 2	2	2	4. 2	2		N.S.	(4/8)	1.76	6.	0	.2	2.37	.5	9.	0 20/00	'	•	.0149	'	
DA :			MOT:	- V :		-	-	-	-		9:	!	1 :	- :	-	-	-	=																
00:00:01			TOTL 0			-3.93	DATA	1-2.52	18	SIGE	DE				_	-	16.7	-		SIGE	E G	7.3	3.6	10.1	15.0	14.2	16.7	18.4	1 8	1:	3.1	6.4	-	
ME 10:0	17.4	02	1 1	"	/CM2	96 (16M)	8	-(W91) 65	54	516	0	5	9	9	4	2	0 20.9	~		SIGA	(DEG)	31.9	29.1	56.5	24.1	-	20.0	18.9	80*100	994	101.		- 1/1.	
1 8	DEG C	VISIBILITY (MI)	I	.24 P	4.40 MM		0) ***	(8M)-2.	(8M).18	TEMP		15.5					14	0 14.0	đ	TEMP	(3)			15.36	2.08	19.4	4.10	4.15	DTH/02 B		•			
J6/34/77	POINT	BILIT	OIN	14 8=	3	71	(39.192M)****	-1.90		S.M.	(M/S)		1.6	1.89	2.03	2.2	2.48	2.5	FITTED DATA	8	15		_		.+	3	3 1	2				0	2	DATA
5163	DEM	VISI		A=		(4W)	(39.1	-( WT)	(4h).	G.X	(DEC)		191.	186.	179.	180.	172.	171.	FITTE	N	(M/S	-	-	1.8	2.	2.2	2.	2.	20/00	.0553	2050.	6910.	100.	
		••	≓.	• ••	••	:	••	••	••		ä		••	••	••	••	••	••	FS	••		••	••	••	••	••	••					••		SER
			(TENTHS)	EXPONENTS	RADIATION	ICHARDSON NO		(1/1)*10	USTAR		HEIGHT (M)	1.	2.	. 4	.8	16.	32.	48.	EAST SQUARES		HEIGHT (M)	1.0	2.0	4.0	8.0	16.0	N	48.0	S ACTION S	4.0	8.0	0.91	39.2*	* 08
			000	-	NET	RICH		-	ח	-	F								LE		Ŧ													

HEIGHT (M) : (4M).2957 (  HEIGHT (M) : (DEG) (M/S)  2. : 179. 3.08  4. : 175. 3.38  8. : 171. 3.84  16. : 177. 3.84  32. : 175. 4.14  48. : 177. 4.32	A	22. 8 5 7. 8 5 7. 17 H1 7 CM 2. 10 99 (16 99 (16 98 17 17 17 17 17 17 17 17 17 17 17 17 17	77 - 2.0 0 - 2.0 0 - 2.0 1 - 2.9 1 - 2.9 1 - 2.9 1 - 3.1 1 - 3		DEW P VISIBILION I I I I I I I I I I I I I I I I I I	TEMP DEG 11L ITY (MI MID 830 MID 38.10 28.10 29.2 (8M) WS TE WS TE (M/S) (C 1.27 20 1.27 20 1.53 19 1.82 19 2.03 19 2.14 19	DEG C (MI) 8 (MI) 8 (MI) 8 (MI) 8 (MI) 8 (MI) 120 (MI) 8 (MI) 1.29 (MI) 1.29 (MI) 1.29 (MI) 1.29 (MI) 1.363 (M	22.3 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3	7L 22 255 275 275 275 275 275 275 275 275 2		DEW VISIB VISIB COW 2 COW 2 CAM)-1 CAM)-1 CAM)-3 CAM)-3 CAM)-3 CAM)-3 CAM)-3 CAM)-3 CAM)-3 CAM)-3 CAM)-3 CAM)-3 CAM)-3 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CAM)-1 CA	Z 203 Z 204	6 1 1 1 1 1 2 1 2 0 0 0 6 6 6 1	23.1 -3.9 5 TOT HI (16M)- (16M)- (16M) (16M)- (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (16M) (1	7.33 DATA) -4.81 .2233 SIGE (DEG) 23.1 25.0 23.1
: MS HEIGHT (M) : (M/S)	TEMP (C)	SIGA (DEG)	SI	GE :	WS (W/S)	===	EMP S	1 GA ) EG)	SIGE (DEG)		WS (M/S	, T	a .	SIGA DEG) (	SIGE DEG)
1.0 : 2.91	19.80	18.9	6.7		1.1	20.					1.9	4 20.6	19	4.	7.2
.13	19.72	17.1	7.6	••	2	5 20.1	19 47			••	2.0	4 20.6	0	1 0.	
: 3.36	19.56			••	1.41	20.	1		.9	••		4 20.4	6	1	
3.61	19.26	14.0	9.6	••	5	19.			6	••	2.2	5 20.2	6	5	
3.87	18.79	2.		••	-	19.	6		2.	••		6.61 9	9	2	
2.0 : 4.16	18.27	11.5		•••	. 0	1 19.	15 38	8.8			2.4	8 19.5	7 27.	. ~	23.8
.0 : 4.33	18.32	8.01		••		.61 5	80			••		5 19.5	9	9	
.0 20/NO :	DTH/02	BU*100	8.1	"	20/00	DTH/C	1*N8 Z0	100	R.		20/00	DTH/D	7	BU* 100	R.I.
) 7670. : 0.4	0655	311	09		.0555	047	1 -1.2	99	69		.0346	0415	•	483 -	=
: .0428	0542	•	5	••	.0312	037		- 012	5	••	1810.	03	-1-	- 054	. 60
: .0230	0316	-1.812	-2.60	••	.0176		-5.	8	6		.0095	01	-3.	- 2	0
. : .0113	90000	181.	0.	••	0	.308	6	672		••	.0144	1	-6-	152 -69	.58

4	
-	
4	
0	
0	
ш	
VE	
œ	
SE	
S	
80	
0	

THER  THER  DEG C 22.8  OEG C -4.8  (NI) 85  HI TOTL 2:L  D HI :: -08 P= .14  31 MW/CM2  SNI92 (16M)-1.56  SNI92 (16M)-1.04:  SNI93 (16M)-1.593:
TIME 16:00:00 ::  G C 22.8  G C -4.8  MI) 85 ::  HI HI  O8 P= .14  I MW/CM2  I (OBSERVED DATA):  1 -92 (16M)-1.56 ::  1 -92 (16M)-1.56 ::  1 -92 (16M)-1.56 ::  1 -92 (16M)-1.56 ::  2 -92 (16M)-1.56 ::  1 -92 (16M)-1.56 ::  2 -92 (16M)-1.57 ::  2 -93 (16M)-1.56
G C 22.8 G C -4.8 MI) 85 HI HI 08 P= .14 I MW/CM2 I (08 SERVED) 92 (16M) 1.1536 (16M) 1.1536 (16M) 21.35 21.35 21.35 21.35 20.64 37.7 20.63 29.2 20.63 29.2
10757

LEAST SQUARES FITTED DATA

	••	NS	TEMP	SIGA	SIGE	••	MS		SIGA	SIGE	••	SM	TEMP	SIGA	SIGE
HEIGHT (M)	••	(N/S)	3	-	(DEG)	••	(M/S	(0)	(DEG)	(DEG)		(M/S)	5	(DEG)	(DEG)
1.0		1.44		45.1	16.4		1.7		17.4	15.0		.93		27.0	6.0
2.0	••	1.58	21.03	41.4	17.3	••	1.89	5 20.82	10.6	15.7	••	16.	1 20.24	23.2	8.9
4.0	••	1.75		38.1	18.3	••	1.9		64.3	16.5	••	1.02		19.9	7.7
8.0	••	1.93		35.0	19.3	••	2.0%	_	58.7	17.3	••	1.07	-	17.0	8.6
16.0	••	2.12		32.2	20.4	••	2.2		53.5	181	••	1.13		14.6	9.7
32.0	••	2.34		29.6	21.6	••	2.3		48.8	19.0	••	1.18		12.5	10.9
48.0	••	2.48	3.12	28.5	22.3		2.4		46.3	19.5		1.22		11.5	11.7
CONTRACTOR		20/00	0TH/02	DTH/DZ 8U*100	R I		ZQ/NQ	DTH/D2	BU*100	a I		20/00	DTH/D2	BU*100	. E
4.0		- 0570	0233	407	12		.0399	0232	321	-10		.0168	.0043	.220	00.
8.0	••	.0314	0202	-1.163	66	••	.0212	+610	646	1.48	••	.0088	.0030	.557	00.
0.91	••	.0173	1+10	-2.664	-5.98	••	.0113	9110	-2.021	-2.57	••	9400.	*000°	.274	00.
39.2*	••	9010	6110	-10-609-	134.14	••	.0125	2100	1.152	000	•	0031	- 0000	25.042-	250 62

4
-
DA
0
0
w
>
œ
SE
90
0

000 00 00 142 144)	GE :: 661: 3.1: 2.0: 2.0: 1.0: 1.0:
0:00 TL 0 11.95	3.1 2.0 1.0
12.8 12.8 25.6 25.6 10.8 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11	E 5.2 8.8 8.8 8.8
C 12.8 C -5.6 J 25 HI TOTL P= .34 MW/CM2 .26(16M) .4 (OBSERVED DATE 1.58 (16M) 1.5	TEMP SIGA (C) (DEG) 11.83 12.25 7.2 12.11 5.9 13.38 4.9 15.54 3.6
1000 H 10	TEMP (CC) 11.83 12.25 12.11 13.38 15.54 16.70 16.70
DEW POINT DEG  LOW MID  LOW MID  LOW MID  COW MID  (4M) .12 (8M)  (4M) .12 (8M)  (4M) .18 (8M)	M.S. 2.65 3.43 4.41 7.28
26 B 11.12 B 11.13 B 1	3 NW4W-
BATE 06/04/77   TIME 21:00:00	MD DEG) 107. 102. 99. 108.
	SIGE: WD (DEG): (DEG) : 107. : 102. .5: 99. .7: 108. .6: 105.
1000 1000 1000 1000 1000 1000	SIGE
C 15.6 C -6.7 J 50 HI TOTL P= .34 MW/CM2 L.00(16M) 1.4 (OBSERVED DATA	000 004460
15 15 20 50 50 50 00 115 115 115 115 115 115 11	SI
HER LG HER LG GG C L5 GG C L5 (MI) 50 HI D HI D HI CMZ N 1 000(100) T4 (00 SER)	TEMP SIGA (C) (DEG) 10.66 11.27 6. 12.25 5. 16.15 4. 18.35 4. 18.87 3.68
MEATHER MEATHER TEMP DEG 18 IL ITY (M) 2 MID 1525 MID -9.19 -49 (8M) 192M) 11.74 10.14 (8M)	\$51 52 102 122 103 123 103 133 103 103 103 103
16/0 16/0 16/0 16/0 16/0 16/0 16/0 16/0	(A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S) (A/S)
DATE 06/04/77 TIME 20:00:00 ::  WEATHER  TEMP DEG	WD DEG) 137. 127. 114. 122.
.38 8.63 9.63	SIGE: WD (DEG):(DEG) 137 1.2: 114 2.2: 121 .8: 120
ATHER  ATHER  DEG C 20.0  DEG C -6.1  Y (MI) 70  HI TOTL 2:1  MID HI 37 P= .27  9.77 MW/CM2  (8M) .89(16M) 1.38:697 (OBSERVED DATA):	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
20.0 20.0 70 T 70 T 70 T 70 T 70 T 8 T 16 T	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
DATE 06/04/77 TIM MEATHER TEMP DEG C VISIBILITY (MI) UM 2 MID HI LOW 1525 MID HI A=03 B=37 P= (4M) .39 (8M) .88 (4M) 6.83 (8M) 15.98 (4M) 6.83 (8M) 15.98 (4M) 6.83 (8M) 15.98	15.84 16.82 17.20 18.71 19.00
MEATHER MEATHER DINT DEG DINT DEG TITY (MI MID 525 MID 3 8=37 -9.77 -9.77 -9.77 -9.77 -9.77 -9.77 -9.77	000800
DATE 06/04/77 T  WEATHER  TEMP DEG C  DEM POINT DEG C  VISIBILITY (MI)  DM 2 MID H  LOW 1525 MID H  A=03 B=37  A=03 B=37  (4M) .39 (8M)  (4M) 6.83 (8M)  (4M) 6.83 (8M)  (4M) 6.83 (8M)	(M/S) 1.56 2.16 2.69 3.669 3.669
DEW P VISIB P	889. 889. 933.
: DATE 06/04/77  HEATHER DEG  : DEW POINT DEG  : VISIBILITY (M :LOM 2 MID :LOW 1525 MID :LOW 1525 MID : (4M) .39 (8M) : (4M) .39 (8M) : (4M) .0681 (8M)	89. 89. 89.
zó	
(TENTHS HT (M) ONENTS RADIATI HARDSON (1/L)*10	F
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO. (1/L)*LO	HEIGHT (M)  1. 2. 4. 8. 16. 32.
S NET L	1 -1

LEAST SQUARES FITTED DATA

		SM	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE
••	5	(M/S)		(DEG)	(DEG)		(N/S)	(3)	(DEG)	(DEG)	••	(M/S)	3	(DEG)	(DEG)
		.41	16.56	3.9	3.5		1.50	11.11	7.4	4.		2.15	11.72	8.3	14.6
	1 :	.70	16.76	3.8	2.7	••	1.90	11.67	6.3	.5	••	2.73	12.01	7.0	8.7
	: 2	500	17.15	3.8	2.1	••	2.40	12.73	5.3	• 2		3.45	12.55	5.8	5.5
	: 2	14.	17.86	3.7	1.6	••	3.03	14.65	4.5	9.	••	4.37	13.54	4.8	3.1
	. 2	2.98	18.93	3.6	1.2	••	3.83	17.64	3.8	9.	••	5.53	15.15	4.0	1.9
	. 3	.59	19.75	3.5	1.0	••	4.84	20.24	3.3		••	7.00	16.89	3.4	=
	4	10.	18.81	3.5		••	5.55	18.36	3.0		••	8.03	19.91	3.0	
	: DU/D2	70	DTH/D2	80*100	R.1		20/00	DTH/02	80*100	R.		20/na	DTH/DZ	BU*100	18
1	: .12	83	.1925	2.465	00.		.1886	.5063	4.823	00.		.2736	.2653	1.222	00.
	10. :	.73	.1580	5.561	00.	••	1611.	.4186	9.927	00.	••	.1732	.2268	2.600	00.
	*0. :	9940	0680.	8.598	00.	••	.0753	.2431	14.302	00.	••	9601.	6651.	4.265	00.
	00. :	162	1800.	3.049	00.	••	.0050	.0088	2.080	00.	••	1800.	-0112	1.085	00.

\* OBSERVED DATA

OBSERVED DATA	A														
	: DATE	DATE 06/04/77		TIME 22:00:00		DATE	: DATE 36/04/77 TIME 23:00:00	TIME	23:00		DATE	: DATE 07/04/77 TIME 00:00:00	MIT T'	E 00:00	: 00:
		MEATHER	HER		••		WEATHER	IER		••		WEATHER	HER		••
		TEMP D	DEG C	13.9			TEMP DE	J 9:	9.5	••		TEMP D	DEG C	11.1	
	. DEM	POINT	DEG C	-3.9	••	DEW	POINT DE	. J 9	-5.6	••	DEW	POINT 0	2 93	-4.5	
	: VIS	IBILITY	(MI) 2	52	••	VISI	BILITY (	MI) 2	2	••	VISI	BILITY	CIW	25	••
	*CO#	MID	H	TOT	1:0 1	MO	LOW MID HI	Ŧ	TOT	.0	LOW	MID	Ħ	TOT	:01 7
CLD HT (M)	*07 :	IN	0	Ŧ	••	LOW	MID		Ŧ	•	LOW	IN	0	H	••
	: A= -	-29 B= -	-38 P=	14.	••	A=	58 8=	-d 90	.43	••	A=	44 8= -	-d 90	.54	
		-6-	19 MW/C	.M2	••		-7.9	S MW/C	42	••		-7-	/MH 09	CM2	•
	: (4M)	8) 70.	1M) .15	1(16M)	.27 :	( H+)	.14 (8M	11 .28	( 16M)	. 50 :	( M )	8) 81.	IM) .3	0(16M)	: 94.
	: (39.	192M)	41 (085	SERVED	DATA):	(39.1	92H1 3.6	1 (085	ERVED !	SATA):	(39.1	92H)	47 (08	SERVED	DATA!
(1/1)	(4H) :	.39 (8	14) . 61	(16M)	.84:	(H+)	1.09 (8M	11 1.83	(H91)	2.69:	(4H)	1.59 (8	IMI 2.0	(H91) 6	2.31:
USTAR	: (4H)	: (4M).1761 (8M).1772 (16M).1780: (4M).1175 (8M).1120 (16M).1063: (4M).0833 (8M).0895 (16M).0991:	3M1 . L772	(16M)	.1780:	(4M)	1175 (8M	1).1120	(16M).	1063:	(4H).	0833 (8	680 · (H)	(H91) S	:1660
	9	NS.	TEMP	SIGA	SIGE :	Q.	WS	TEMP	SIGA	516E :	9	NS.	TEMP	SIGA	\$ 16E :
HEIGHT (M)	:(DEC)	(N/S)	-	1056)	DEG) (DEG):(DEG)	DEGI	(N/S)	(C) (DEG) (DEG):(DEG)	(930	(DEG):		(M/S)	(C) (DEC)		(DEG):
1.			9.66					8.48					5.78		
2.	: 125.	2.17	66.6		••	148.		8.82	24.2	••	159.	11.11	6.10		••
;	: 119.	2.88	9.93		••	141.		8.94	24.7	••	146.	1.76	6.56		••
	: 115.	3.83	11.03		2.3:	131.		9.93	54.9	3.4:	131.	2.76	8.47		1.4:
16.	: 117.		12.19	5.4	1.6:	122.	3.71	11.26	20.3	4.5:	122.	3.83	10.19	2.8	1.6:
32.	: 106.	6.72	13.09		1.4:	103.		13.58	2.0	3.6:	104.	4.86	10.94		1.7:
48.	. 98		14.25			105.		14.76	4.5	3.1.	03.	4.76	13.86		1.73

												-			
HEIGHT (M) :	- 3	WS (M/S)	TEMP (C)	SIGA (DEG)	SIGE (DEG)		CH/S1	TEMP (C)	SIGA (DEG)	S16E (0EG)		WS (N/S)	TENP	SIGA (DEG)	\$16E (0EG)
1.0	-	1	.73	7.0	5.0		1.24	8.47	54.4	4.4		.81	6.08	10.2	1:1
2.0 :	2.	2.17 9	9.90	5.7	3.8	••	1.67	8.68	36.5	4.2	••	1.19	6.33	7.5	1.7
. 0.4	2.		1.22	4.7	5.9	••	2.26	9.10	24.4	4.0	••	1.73	6.82	5.5	1.6
8.0	3,		1.83	3.8	2.3		3.05	06.6	16.4	3.9	••	2.52	1.76	1.4	1.5
16.0	. 5		.89	3.1	1.7		4.12	11.32	11.0	3.7	••	3.67	9.43	3.0	1.5
32.0 :	9		1.42	5.6	1.3	••	5.56	13.50	7.3	3.5	••	5.35	11.99	2.2	1.4
48.0	8		+11+	2.3	1:1		6.63	14.79	5.8	3.5	••	6.67	13.50	1.9	1:4
	20/00		0TH/02 8	BU*100	7.		20/00	DTH/DZ	BU*100	RI		20 / NO	DTH/D2	8U*100	I.
. 0.4	.2781		1650	1.096	00.		.2296	.2127	2.312	00.		.2222		4.638	00.
8.0	.184		.63	2.238	00.		.1550	.1952	4.643	00.	••	6191.		7.988	00.
: 0.91	.123	Ī	62	3.981	00.		1041	.1602	8.319	00.	••	.1180		12.260	00.
39.2*	.08		125	960.8	00.		.0281	.0838	10.875	00.	••	.1188	.1925	31.093	00.

1.66

5485 :: 5485 :: 5485 :: 6 DATA) :: 6432:: 6118	SIGE: (DEG):
TIME 03:00:00  7.2  -5.0  HI 7 TOTL 8 2135 HI 5485  P= .30  NW/CM2  -71(16M) 1.37  -71(16M) 1.37  0.36 (16M) 8.50 0583 (16M) 0432	1 -0-104
8 - 8 3	TEMP SIGA (C) (DEG) 5.39 5.60 10. 5.69 8. 6.70 6. 8.02 3. 9.53 3.
DATE 07/04/77 WEATHE TEMP DEC DEW POINT DEC VISIBILITY (N DW MID I LOW MID I COW MID I	(M/S) (M/S) (M/S) 1.48 2.11 3.04 4.33 4.67
DATE 07/04  WENT  DEW POINT  VISIBILITY  LOW MID  LOW MID  A=34 B=  (4N) .31  (4N) .31  (4N) .31  (4N) .0820	MD (DEG) 176. 1772. 1772. 1772. 1779. 166. 166.
1:00	SIGE: WD (DEG): (DEG) 176 172 3.0: 171 6.0: 179 6.4: 166
C 6.7 (C -5.6 ) 20 TIME 02:00:00 (C -5.6 ) 20 TOTL 2135 HI TOTL P= .43 MW/CM2 (LOBSERVED DATE 6.26 (L6M) 2.9 (16M) 2	SIGA (DEG) 54.7 54.7 2.3 49.6 37.4
HER EG C EG C (MI) 1 HI 1 HI 1 HI 1 HI 1 HI 1 HI 1 HI 1 HI	TEMP (C) ( 7.09 7.69 8.15 9.27 9.56 10.07
DATE 07/04/77 TIME 02:00:00 : D  WEATHER  TEMP DEG C 6.7 ' :  DEW POINT DEG C -5.6 :  LOW MID 1 HI TOTL 1:LD  LOW MID 2135 HI : L  A = .19 B = .48 P = .43 : A  -5.44 MW/CM2  (4M) 1.06 (8M) 1.98(16M) 2.90 : (4M) 44.43 (8M) 76.26 (16M) 80.85 : (4M) 44.43 (8M) 76.26 (16M) 80.95 : (4M) 40.0120 (8M) .0095 (16M) .0091 : (	MS (M/S) (M/S) .58 .66 .91 1.17 1.72 2.28
DEW F  OFW F  LOW  LOW  (4M) 1  (39.19	MD (DEG) 325. 260. 170. 184. 179.
1 9 6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	SIGE: WD (DEG):(DEG) : 325. : 260. 3.1: 170. 1.9: 184. .4: 179.
6.1 -6.7 20 TOTL 5 HI 5 HI 1(16M) .8 1(16M) .8	5.8 5.0 5.0 5.0 5.0 7.0 1.4
/04/77 TIME WEATHER EMP DEG C INT DEG C LITY (MI) 21 MID 1 HI MID 2135 B=-1.08 P= -6.83 MW/Cl 24 (8M) .51 MID 25.51 MID 2135 B=-1.08 P= -6.83 MW/Cl 56.83 MW/Cl	TEMP (C) (C) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B
DATE 07/04/77 TIME  MEATHER  TEMP DEG C  VISIBILITY (MI)  DW  MID 1138 P=  -6.83 MW/(  (4M) .24 (8M) .51  (4M) 2.75 (8M) 5.51  (4M) 2.75 (8M) 5.51	2.04 2.68 3.60 4.79 5.94 5.71
DATE 07/04/77 TIME  WEATHER  TEMP DEG C  DEW POINT DEG C  VISIBILITY (MI) 2  LOW MID 1 HI  LOW MID 2135  A=56 B=-1.08 P=  -6.83 MW/C  (4M) .24 (8M) .51  (4M) 2.75 (8M) 5.51  (4M) 1.158 (8M) 5.54	, MD (DEG) 99. 97. 97. 104.
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO. (1/L)*10	HEIGHT (M)  1. 2. 4. 8. 16. 32.

OBSERVED DATA

	••	MS	TEMP	S	SIGE	••	MS	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE
HEIGHT (M)	••	(M/S)	3	(050)	(DEG)		(M/S)	(0)	(DEG)	(DEG)	••	(M/S)	(3)	(DEG)	(DEG)
1.0		1.68		10.4	29.8		.39	7.58	15.4	1.3		1.42	5.31	12.3	4.
2.0		2.14	7.81	7.1	14.1		.52	7.74	17.6	1.8	••	1.75	5.52	9.7	• 5
4.0	••	2.12		4.8	6.7		.70	8.05	20.0	2.5	••	2.16	5.92	7.7	
8.0	••	3.46	9.75	3.3	3.2	••	.95	8.61	22.8	3.4	••	2.66	19.9	1.9	6.
16.0		4.40		2.2	1.5	••	1.28	9.52	25.9	4.7	••	3.28	7.94	4.8	1.2
32.0	••	5.60	14.29	1.5	.7		1.73	10.50	29.5	9.9	••	4.05	9.57	3.8	1.5
48.0	••	6.44		1.2	• 5	••	5.06	10.36	31.9	8.0	••	4.58	10.01	3.3	1.8
		20/00	DTH/DZ	80*100	1 %		20/00	DTH/02	80*100	۳. ا		20/00	DTH/D2	BU*100	2
4.0	-	.2203	.3338	2.511	00.		.0715	.1549	17.439	00.		.1518	.2012	2.420	00.
8.0	••	1041.	.2888	5.346	00.	••	.0483	.1329	32.767	00.	••	.0936	.1778	5.613	00.
16.0	••	1680.	8861.	9.031	00.	••	.0326	.0889	47.963	00.	••	.0577	.1310	10.834	00.
30.2*		4710	9010	1.622	00		0350	DARR	62.032	00		0100	0404	13 644	00

	DAIE	DATE 07/04/77	17 TIME	E 04:00:00	: 00:	DATE	77/04/17		TIME 05:00:00	: 00:	DATE	77/04/17		TIME 06:00:00	00:
		WEATHER	HER		••		WEATHE	a		••		WEATHE	œ		
		TEMP DEG (	DEG C	6.7	••		TEMP D	EG C	1.9	••		TEMP DEG	2 93 EG C	6.7	
	DEM :	DEM POINT DEG	DEG C	-6.1		DEW	DEW POINT DEG	EG C	1-9-	••	DEW	DEW POINT DEG	C C	1-9-	
	. VIS	VISIBILITY (MI)	(MI)	20	•	VISI	VISTBILITY (MI)	( ( I W )	02	••	VISI	VISIBILITY (MI	(MI)	20	
CLD (TENTHS) :	*COM	MID	I H I	7 TOTL	1:8	10M	MIO	4 HI	TOT	.t 1.	4:LOW	MID	5 HI	3 TOTL	L 8
CLD HT (M)	FOM:	IW	MID 2135	5 HI 5485	. 584	LOW	OIN	D 2135 H	IH S		LOW	MID	0 3050	Ξ	5609
EXPONENTS	: A= -	A=30 B=46 P=	-46 P=	.39	••	A= -	A=10 B=	.51 P=	.22	•	A= -	A=66 B=23	.23 P=	.33	
NET RADIATION :		-6-	-6.83 MW/C	CM2	••		-9-	14 MW/CM2	: M2			-4-	.61 MW/CM2	CMZ	
RICHARDSON NO.	( 4H)	.13 (8	IM) .3	O( 16M)	.62 :	( M+)	.58 (8M)		1.39(16M)	2.26 :	( W )	.27 (		.59(16M)	1.03
	1 (39.	192M114.	19 (08	SERVED	DATA):	(39.1	92M) .	75 (08	SERVED	DATA):		92M)	42 (08	SERVED	DATAI
(1/1)*10	(4H)	(4N) 1.00 (8M) 2.01	IM) 2.0	1 (16M) 4.00:	4.00:	1 (M4)	(4M)14.06 (8M)37.96 (16M)49.29:	M) 37.9	( 16M)	49.29:		(4M) 3.35 (8	(8M) 7.1	5 (16M)	10.63
USTAR	(H4)	14M).1282 (8M).1138	3M).113	(W91) 8	116M).0948:	(4M).	(4M).0537 (8M).0319 (16M).0244:	M1.0319	(H91)	.0244:		-	M) . 065	8M) . 0658 (16M) . 0544	.0544
	QX :	M.S.	TEMP	SIGA	SIGE :	Q.	MS	TEMP	SIGA	SIGE :	Q	N.S.	TEMP		SIGE
HEIGHT (M)	: ( DEC )	(M/S)	(3)	(DEC)	(DEG):(DEG)	(DEG)	(M/S)	(3)	(DEC)	(DEG): (DEG)	(DEG)	(M/S)	(C) (DEG)		(DEG):
1.			4.41					3.95					3.54		
2.	. 168.		4.58	7.4	••	165.	1.46	4.54	4.9	••	190	1.60	3.83		
**	165.		4.60		••	161.	2.23	5.48	4.6	•	180.	2.15	4.17		
	: 162.		5.33		2.4:		2.83	6.63	3.4	.8	169.	2.89	5.51		2.7
16.	: 168.	4.58	6.25	3.6	1.3:	159.	3.02	16.9	3.1	1.3:	164.	3.22	6.56	29.7	4.4:
32.	156.	5.82	9.48		.8.		3.02	66.95	3.5	1.9:	139.	3.93	7.36		3.2
•	-	-													

	•	MS			SIGE	••	MS	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE
HEIGHT (M)	-	(M/S)	(0)	(DEG)	(DEG)	••	(M/S)	3	(DEG)	(DEG)		(M/S)	3	(050)	(DEG)
1.0	ï	1.42			5.5		1.50	4.58	6.4	.3		1.33	3.71	101.9	5.8
2.0		1.86	4.40	7.2	4.0	••	1.75	4.78	4.5	4.	••	1.67	3.92	64.7	4.9
4.0		2.43			5.9	••	2.04	51.5	4.2	9.		2.11	4.32	41.1	4.2
8.0		3.18			2.1	••	2.39	5.82	3.9	6.		2.65	5.07	26.1	3.6
16.0		4.19			1.5	••	2.79	6.84	3.7	1.3		3.34	6.31	16.6	3.0
32.0	•	5.43			1:1	••	3.25	7.59	3.4	1.8	••	4.21	7.80	10.5	2.6
48.0	•	6.35			6.	••	3.56	6.63	3.3	2.2		4.82	7.94	8.1	5.4
		20/00	DTH/DZ	80*100	1.0		20/00	DTH/02	BU*100	۳.		70 / NO	0TH/02	8U*100	R.
4.0	ï	.2197	.1823	1.744	00.		.1058	.1843	2.483	00.		.1634	.2022	2.577	00.
8.0		.1437		3.878	00.	••	1190.	.1508	5.952	00.		.1029	.1760	5.642	00.
16.0		.0939		8.134	00.	••	.0360	.0838	4.677	00.		.0648	.1237	156.6	00.
39.2*		0138		12.588	00.	••	.0163	.0056	3.072	00.		1890.	.0563	15,431	00.

4.4:

4
-
4
2
C
u
VED
4
A.
8
-

	••	••	••	**	••	••	••	••	••	••	••	••		••	••	••		••		:
00:				,				5.45	DATA	-3.58	1221.	SIGE	(DEG)				16.	17.1	19.0	22.
00:00:60	2.6	3.9		TOT	H	==	12	16M1-	(OBSERVED DATA	(16M)-3.58	(164)	IGA	EG)		19.5	18.0	17.3	19.6	19.9	17.8
TIME	- -		11 85	Ŧ	3660	5 P=	MW/CM2	(8M1-2.28(16M)-5	COBSE	(8M)-3.02	[4M].1126 (8M).1177	TEMP SIGA	3	2.83	2.70	5.46	12.49	2.27	5.06	1.78
07/04/77 WEATHER	DEG (	DEW POINT DEG	TY CH	9 0	MID	1. =	27.21		*****	( 8M)	( 8M)			1						
120	TEMP	MIOA	1811.	H		.00 B=		76	(39.192M)**	4M1-2.05	11126	MS	(H)			-	1.27	1.		1.
DATE		DEW	VIS	MO	LOW	A=		(4M)	(39.	(4H)	(4H)	2	DEG )		35.	28.	18.	17.	6	8
• • 8		••	••	5:1	••	••	••	. 17.	DATA):	14.49:	.0454:	SIGE : WD	DEG) :	•	••	••	4.2:	4.0:	2.7:	1.9:
TIME 08:00:00	12.8	2.0		TOTL	H	+1.	12	16M) I	( OBSERVED D	(W91)	(H91)		( DEG )		6.7	6.3	1.9	9.6	4.0	13.3
ox	U I	ں	11) 85	Ŧ	4270	=d +	MW/CF	(8M)15(16M)		21	.2016	TEMP S	()	8.52	8.46	8.19	8.34	8.19	8.47	9.86
07/04/77 WEATHER	TEMP DEG	DEW POINT DEG	SIBILITY (MI	410 5	MIO	B=44	7.18		49 .9 (1	36 (8M)	)2 (8M)	HS T			2.36	19.2	2.80	76.2	3.46	3.82
DATE 07.	T	EN POI	VISIBIL		3	•06 B≈		M) 12	(39.192M)	14M)36	(4M) -2102						61.			
0 		۵	>	LOW	2	# V :	_	*	(3	4 :		9	1 DE		7	9				
00:				L 5:1				4.48	DATAI	****	(16M).0017:	SIGE :	(DEG): (DEG)		•		6.	1.3:	3.1	0.9
01:00:00	6.1	-5.6	2	TOTL	Ħ	.21	M2	8(16M)14.48	SERVED DATA	(16M)***	(16M)	SIGA	DEG)		15.0	6.6	4.9	13.6	29.9	7.7
TINE ER	2 5	S	41.1	5 HI	3050	=d 50	.04 MW/C		.67 (OBS	(8M)****	1.0035		(3)	6.18	6.33	69.9	7.32	7.57	8.12	8.87
CATE 07/04/77	TEMP DEG	DEM POINT DEG	VISIBILITY (MI	MID	MIO	.05 8= 1.05 P=	1.0	-		-	(4M).0076 (8M).003	!	(N/S)		.73	.87	10.1	18.	1001	1.88
TE 07	_	EN PO	ISIBI		3			4H) 2.18	139.192M1	*****(N5	M) .00	!			.0	.6.	28.	.6	2.	
	••		> "	*C7:	97 :	: A=				+) :	. (4	3	: ( DEC)		9	. 4	: 2		: 32	: 32
							MOIT	ON NO		011			£							
				(TEN1	CLD HT (M)	<b>EXPONENTS</b>	NET RADIATION	RICHARDSON NO.		(1/1)*10	USTAR		HEIGHT (M)	-	2.	4.	8	16.	32.	48

LEAST SQUARES FITTED DATA

	••	MS		S	SIGE	••	MS	TEMP		SIGE	••	MS	TENP	SIGA	516
HEIGHT (M)	••	(M/S)	3	(050)	(050)		(M/S)	3	(DEG)	(DEG)	••	(M/S)	3	(DEC)	(DEG)
1.0		.61			.1		2.11	8.49	5.6	11.5		1.01	12.71	18.6	11.7
2.0	••	.71	6.46	11.0	.2		2.33	8.44	5.9	8.5	••	1.09	12.67	18.6	13.1
4.0	**	18.			4.		2.57	8.36	6.1	6.3	••	1.17	15.51	18.6	14.5
8.0	••	46.			8.		2.84	8.23	4.9	4.6	••	1.26	12.50	18.6	16.1
16.0	••	1.08			1.6		3.14	8.12	1.9	3.4	••	1.36	12.30	18.7	18.0
32.0		1.25			3.4		3.46	8.55	7.0	2.5	••	1.47	11.99	18.7	20.0
48.0	••	1.36			5.5		3.67	9.83	7.1	2.1	••	1.53	11.81	18.7	21.2
		20/00	DTH/02	80*100	۳. ا		ZQ/NQ	DTH/02	80*100	RI		za/na	DTH/DZ	8U*100	R.
4.0		.0387	.0936	7.917	00.		.0855	.0260	220	06		.0292	01190	758	24
8.0	••	.0223		21.687	00.		-0472 -	0095	262	15	••	. 1510.	+910	-2.263	-1.93
16.0	••	.0129		52.470	00.		.0261	.0236	2.142	00.	••	. 0085	+110	- 50404 -	11.99
39.5*	••	.0544		198.991	00.		.0225	6960.	39.383	00.	••	• 0025	5100	17.646-1	13.86
,	9000	VEN CAT		-		-					1			-	
	103EL	* UDSERVED DAIA	•												

CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSON NO (1/L)*10 USTAR		DEW POINT VISIBILITY **LOW MID **LOW MID **A=26 B= **A=26 B=	F E # 5 1 5 5	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	18.0 -3.3 85 TOTL 0 HI -09 (CM2 31(16M)** SSERVED D 7 (16M)*	"L 3 ***** *****		Si	TEMP DEG POINT DEG BILITY (MI MID 3 MID 3 MID 3 42.43 90 (8N)-92N)-3.51 2.40 (8M)-2.354 (8M).	1 1 .	C 22.2 C -5.0 ) 85 HI TOTL 3660 HI P= .10 MW/CM2 2.61(16M)-5 (085ERVED D 3.44 (16M)-	TL 3		TEM DEW POIN VISIBILI OW MI LOW A=01 B (4M)41 (4M)-1.11 (4M)-1.11	ICHED HW 4	DEG C DEG C 3 HI MID 3050 03 P= 6.28 MW/C (8M)-1.07 2.77 (08S (8M)-1.43	NIN I-M	3.5 4.7 TOTL 3 HI .13 2 16M)-1.68 RVED DATA) (16M)-1.11
HEIGHT (M)		: WD	WS T	TEMP S	SIGA DEG)	SIGE (DEG)	: WD	Ξ	HS /S)	ENP C)	SIGA	SIGE (DEG)		ND DEG)	WS (W/S)	TEMP	SIGA (DEG)	SIGE (DEG)
1. 2. 48. 48.			1.12	45 934 934 937 937 937 937 937 937 937 937 937 937	43.1 49.0 32.7 32.6 21.4 21.4		! !	000000	0.4.4.0 14.0.0 14.0.0 14.0.0 14.0.0	9 . 96 9 . 28 9 . 28 8 . 80 7 . 82 7 . 82	22.3 21.7 19.7 16.2 14.0			1	1.72 1.90 2.08 2.29 2.51 2.56	20.94 21.16 20.65 20.49 20.35 20.35 20.10		
LEAST SQUA	# 1	S FITTED DAT  " WS  " (M/S)	DATA TEMP		SIGA DEG) (	SIGE :		WS (W/S)	TEMP (C)		S1GA DEG)	SIGE (DEG)		MS (R/S)		TEMP (C)	SIGA (DEG)	\$16E
1.0		: 1.05	-	59		18.9		5.09	19.74		0	7.8		1.59			27.2	15.4
2.0		11.1	1 15.28	64		20.4		2.24	19.64	23.8	œ 0	800		1.73			27.0	15.7
8.0		1.2	-	34		23.8		2.57	19.09		4	11.2		2.0			26.7	16.3
16.0		: 1.33		28		25.7		2.75	18.51		2	12.6	••	2.2			26.5	16.6
32.0		1.41	14.5	3 24.1		29.0		3.07	17.86	14.2	77			2.48	20.04		26.3	17.0
		20/NO :	DTH/02	BU	*100	2.	10	20/00	DTH/02	80*100	100	RI		Z0 /N0	OTH/02	1	8U*100	12
4.0		0233	0224		1	25		! "	.0818	76	762	24		.0564	0387	7	574	20
8.0		: .0123		•		1.71			0683	-2.217		-1.72		.0309	030			1.35
39.2*		.00038	0132	-19.007	7	43.97		- 6510	2140	-4.667		19.28		.0169	0143		-2.382	-4-43

	_
•	
۰	
ć	τ
C	3
C	3
L	ū
200	>
0	
1	ñ
0	c
2	1

		DAIE OLIOANI	THER	E 13:00:00		DATE	07/04/77 WEATHE	2	TIME 14:00:00	: 00:	DATE	07/04/77 WEATHE	~	TIME 15:00:00	00:0
		TEMP DEG	U	25.1	••		TEMP D	2 9	25.9	••		TEMP	DEG C	25.9	
	: DE	DEW POINT DEG	J	-4.3	••	DEW	DEM POINT DEG C	J 93	-4.5	••	DEW	POINT	: DEW POINT DEG C	-4.2	
	: VI	VISIBILITY (MI	-	85	••	VISI	BILITY	S LIMI	5	••	VISI	BILITY	(HI)	85	
LD (TENTHS)	*10M	1 MID	3 HI	TOTL	4:	10M	I MID	2 HI	TOTL		MO.	4 MID	2 HI	TOTL	7
CLD HT (M)	. LOW	1525 MID	ID 3050 HI	IH O	••	HOT	1525 MIL	3050 HI	H		TOM	1525 M	10 305	3050 HI	
EXPONENTS	. A=	-06 B=	.26 P=	• 02	••	A=	26 8=	.37 P=	.07	••	A=	30 8=	-14 P=	.11	
NET RADIATION		-	.54 MW/L	CM2	••		38.	TO MM/C	M2	••		29	.31 MW/	MW/CM2	
RICHARDSON NO.		(4M)-25.2 (8	68M)-78.6	(16M)-	153.	( 4H)	18) 99	41-1-84	(16M)-	2.65 :	(4M)	) 61	8M15	3(16M)-	10.1.
	: (39	_	.03 (08	ERVED	DATAL	1.66)	92M1 2.	28 (085	ERVED	DATA):	(39.1	- (M26	.25 (08	SERVED	DATAI
(1/1)*10	H+) :	1 (4M) -66 0 (8	8M1 -98	3 (16M)	. 9 50-	-(H+)	1.79 (8)	41-2.44	(164)	-1.75:	(4H)	53 (	BM17	1 (16M)	19
USTAR	(H4) :	3318 (6	8M) .400	12 (16H	. 3657	(4N)	(4M).2225 (8M).2238 (16M).2095:	4).2238	(191)	.2095:	(4H)	(4H).1843 (8H).	8H) . 184	1.1840 (16M).1822:	.182
	QX 	SH	TEMP	!	\$16E :	9	MS	TEMP	SIGA	S16E:	OM	MS	TEMP	SIGA	SIGE
HEIGHT (M)	: ( DEG)	(M/S)	(3)	( DEG )	(DEG): (DEG)	(DEG)	(M/S)	(2)	DEG )	(DEC) (DEC):(DEC)	10661	(M/S)	(3)	(DEG)	(DEC)
1.			21.62					23.03					23.03		
2.	: 108		21.64		••	129.	2.20	22.90	6.65	••	192.	2.05	22.97		
+	1000				••	125.	2.37	22.04	55.0	••	184.	2.23	22.11		
8.	: 103				22.0:	118.	2.56	22.37	46.8	16.6:	180.	2.33	22.56		18.
.91	: 109				27.8:	122.	2.62	22.27	36.6	20.2:	180.	2.51	22.48		22.
32.	: 179	. 1.30		15.9	31.3:	121.	2.65	22.05	30.0	26.93	169.	2.70	22.23	35.9	21.5
48.	. 143				. 3 36			33 00				30 0	22 00		,

LEAST SQUARES FITTED DATA

			SM	TEM		SIGE		MS	TEN		SIGE		MS	TEM		SIGE	! "
HEISHT (M)	2		(M/S)	3	(DEG)	(DEG)	••	(M/S)	3	(DEG)	(DEG)	••	(N/S)	(3)	(DEG)	(DEG)	••
1.0			1.29	!	'	13.2		2.13	22.74	75.3	7.6		1.89	22.77	92.4	14.2	! "
2.0		••	1.31			15.7	••	2.24	22.69	63.1	8.6	••	2.04	22.74	75.2	15.7	••
4.0		••	1.33		-	18.8	••	2.36	22.60	52.9	12.6	••	2.20	22.69	1.19	17.2	••
8.0		••	1.35		•	22.4	••	2.48	22.44	44.3	16.2	••	2.37	22.58	49.7	18.9	••
16.0		••	1.37	20.89	55.6	26.7	••	2.61	22.19	37.1	21.0	••	2.55	22.40	40.4	8.02	••
32.0		••	1.39			31.9	••	2.75	21.96	31.1	27.0	••	2.75	22.16	32.9	22.9	••
48.0			1.40			35.4		2.83	22.12	28.0	31.4	••	2.87	22.08	29.1	24.2	••
			20/00	DTH/DZ	BU*100	я 1		ZQ/NQ	DTH/DZ	BU*100	2		20/00	DTH/D2	BU*100	<u>-</u>	! "
4.0			. 3006.	0320	962	03		0040	0321	306	08		.0544	0167	184	02	! "
8.0			.0033	0257	-3.011	46	••	.0211	0247	850	39	••	.0293	0137	518	26	••
16.0		••	- 2100-	0133	-6.044	-5.13	••	1110.	8600	-1.220	93	••	8510	0076	987	-1.01	••
39.24			6110.	******		00.	••	.0137	6110.	8.012	.00	••	9510	0019	-1.208	+0.4-	••
*	. 08	SER	OBSERVED DATA														!

	(4M) (4M) (4M) (4M) (4M) (4M) (4M) (4M)	4M)57 (4M) -1.53 (4M) -2715 (4M) -2715 (4M) -2715 (4M) -2715 (4M) -2.71 (6. 2.96 58. 3.14 4. 3.29 7. 3.24	10.88 (8M) (8M) (8M) (8M) (8M) (8M) (8M) (8	(8M)-1.77 (8M)-1.77 (8M)-2.34 (8M)-2.34 (8M).2738 (8M).2738 (1 23.21 (2 22.20 (4 22.57 (5 22.55 (6 22.57 (6 22.57 (7 22.	I-W INOI	\$1.20 PA	(44 (44 (44 (44 (44 (44 (44 (44 (44 (44		8= .14		.08	TOTL 8	A	~==	830 MID	3050 13 P=	0 HI 15	۔
日 の日		I ZI NNMMMM		EMP 33.38 3.21 2.20 2.71 2.55 2.55 1.96	100	201		61 - 2	(8M) (8M) (8M)	MW/CM2 28(1 (OBSER 39 (	VED (6M)	71 DATA)		61.61	-2-2-8-	=	0>	.08 DATA)
: (DEG)		พ่งคลัก		3.38 3.21 2.20 2.71 2.55 2.55 1.96				=	WS T /S)	EMP S	SIGA DEG 1	SIGE (DEG)	.0	_	MS (M/S)	TEMP (C)	\$ 16A ( DEG )	SIGE (DEG)
=		, w w w w		2.55				7	84	3.06	19.9				9	22.66		
35	::			2.27		•		4 m m	00.5	2.61	14.7	6.9			96	22.46		
			,		!	12.6		1	23	22.33	10.	80			3.89	22.22	199	9.9
- 1	FITTED	D DATA	4 I	1										1				
	È	M/S)	(C)	20	) EG )	SIGE (DEG)		M/S)	3	-	DEG) (	SIGE DEG)		(N/S)	()		SIGA DEG)	S1GE (DEG)
	2		23.01	-	3.2	5.1		4	22.74	23		2.1		2.20	22.4		1.9	
	70		22.89		9.0	6.6			22.69	27	75			2.71	22		3.0	4.9
	m	3.05	22.75		8.6	8.1		2.89	22.62	15	7.	8.9	•••	3.01	22.38		12.9	4.5
	, ,		22.14	-	8.5	10.9		2 0	22.27	2=				3.71	22		.:	3.8
	6	0	22.02		8.1	5		.3	22.10		.5			3.94	21.9		9.0	3.6
	20/00		DT H / DZ	8U*	100	3.1	na :	20/00	DTH/02	80*1	00	RI		20/00	DTH/D2	Z BU*	*100	<u>م</u>
	.0403	1	0279	17	72	05	0	'	.0073	0		00.		0945	.0059		043	00
	.0210		0236	5	37	15	.00	•	.0063	161		07		0523	94000		01	00.
	0110		1510	-1.2	62	06-	0.	- 4410	*****	398		61	•	0530	.0021		159	000
. !			-		710	1076		' :	7000			10.		1	00000	-		00.0

UBSERVED DATA				1					!							
	••	DATE 3	DATE 07/04/77	TIME	_	00:00:61	. DATE	07/04/77		TIME 20:00:00	: 00:0	DATE	DATE 07/04/77	7 TIME	E 21:00:00	00:0
	••		MEATHER	ER			••	MEA	WEATHER		•		WEATHER	HER		
	••		TEMP DEG	၁ ၅	21.1			TEMP DEG	DEG C	18.3	•		TEMP DE	J	14.4	
	••	DEW P	POINT DEG C		-7.2	•	. DEW	POINT	DEG C	-7.2	••	DEW	POINT OF	DEG C	-7.8	
	••				70		: VISI	BILIT	(IN)	90		VISI	BILITY	=	52	
CLD (TENTHS)	::	:LOW 3		4 HI	TOT	11 7	*COM	MID	7 HI	TOT	TL 7:	LOW	MID	1 HI	10	7 7
CLD HT (M)	••	1 107	1830 MID	3050	Ξ		HOT :	Z	MID 3050	Ħ	•	LOW	MID	3050	IH 0	
EXPONENTS	••	i	54 8=84 P=	84 P=	.34		: A= -	.33 B=-	B=-1.34 P=	50	•		.62 B= -	-68 P=	.32	
NET RADIATION			-7.6		CM2			-8	8.72 MM/	MW/CM2	••		-6-	83 MM/	CM2	
ICHARDSON NO	••	(H)	.22 (8M)	**	5(16M)	99.	: (4M)	.13 (	(8M) .2	.22(16M)	.34 :	( H+)	.19 (BM	_	43(16M)	.80
	••	(39.192M)	2M1 2.13		( OBSERVED (	DATA	: (39.	39.192M1 L.		OBSERVED	DATA):	(39.1	192M) 2.	11 (08	OBSERVED	DATA
(1/1)*10	••	(4H) 2			4 (16M)	1 4.45:	-	_	-			-	-	_		_
USTAR	••	(4M).1117	117 (8M)	1.0928	8 (16M)	.0880.	: (4M)	.1186 (6	8M) . 1287	37 (16M)	1414:	(4H)	1352 (8M	M) .1073	3 (16MI	9280.
		Q.A	MS	TEMP	SIGA	SIGE	9	M.S	TEMP	SIGA	SIGE :	QX	S#	TEMP	SIGA	SIGE
HEIGHT (M)	:		(N/S)	3	(DEC)	(DEG): (DEG)	: (DEG)	(M/S)	3	( DEC )	(DEG): (DEG)	(DEC)	(M/S)		(DEG)	(DEG)
1.				17.61					13.95					11.65		
2.	••	101	1.90	18.10			.111.	1.63		7.0	••	130.	2.13	11.88	7.8	
+	••	95.		17.93	3.5		: 105.	2.28	14.32	9.6	•	125.	2.83	11.66		
	••	86.		20.11		1.6		3.12		3.9	2.5:	120.	3.86	12.76		2.03
16.	••	.68		21.49	2.5	2.2		3.81		3.6	3.3:	122.	5.51	14.71		
32.	••	92.		21.68		.4.	: 105.	7.16		2.4	.7:	131.	5.40	17.11	2.4	.7
48.		92.	5.45	21.56	6.	.5:	. 107.	7.86	20.63	2.6	.3:	135.	2.68	17.30		9.
LEAST SQUARES FITTED DATA	tes.	FITTED	DATA													
		SI		TEMP	SIGA	SIGE		MS 1			SIGE :	SH			SIGA	SIGE
HEIGHT (M)	••	(H/S)	(2)		(DEG) (	(DEC)		•	(0)	DEG) (	(DEG) :	(N/S)		(3)	DEG	(DEG)
1.0		1.58	8 17.73		7.1	12.1	1 1				. 6.4	1.			6.4	8.9
2.0	••	2.00			6.4	6.8	1 :	1.58 14.	14.21	6.8	25.6 :	2.32	32 11.60		9.7	4.3

		SM	TEMP	SIGA	SIGE		MS	TEMP	SIGA	SIGE		SM	TEMP	SIGA	SIGE
HEIGHT (M)	=	(M/S)		-	(DEG)	••	(M/S)	3	(050)	(DEG)	••	(N/S)	(3)	(DEC)	(DEG)
1.0	"	1.58		7.1	12.1		11.11	13.94	8.6	6.49		1.86	11.33	14.9	8.9
2.0	••	2.00		4.9	8.9	••	1.58	14.21	8.9	25.6	••	2.32	11.60	9.7	4.3
4.0	••	2.53		3.4	3.8	••	2.23	14.73	5.4	10.1	••	2.89	12.11	6.3	2.7
8.0	**	3.20	19.61	2.3	2.1	••	3.17	15.71	4.3	4.0	••	3.61	13.08	4.1	1.7
16.0	••	4.05		1.6	1.2	••	4.49	17.40	3.4	1.6	••	4.51	14.71	2.7	1.0
32.0	••	5.13		1:1		••	6.37	19.74	2.7	9.	••	5.63	16.83	1.7	9.
48.0	••	5.89		6.	5.	••	7.81	50.66	5.4	*	••	04.9	17.41	1.4	••
		20/00	DTH/02	BU*100	۳ 1		20/00	0TH/02	BU*100	F.		20/00	DTH/DZ	BU*100	F.
4.0		.2005	.2603	2.181	00.		.2652	.2604	2.842	00.		.2155	.2569	1.687	00.
8.0	••	.1268	.2158	4.503	00.	••	.1880	.2329	5.042	00.	••	.1345	.2268	3.810	00.
16.0	••	.0802	.1269	6.580	00.	••	.1333	.1779	7.619	00.	••	.0839	.1665	7.144	00.
39.5*	••	.0063	.0025	.439	00.	••	.0437	•0594	5.453	00.		.0175	•0519	3.714	00.
*	OBSE	OBSERVED DATA	A								-				

4	t
٠	
<	τ
C	2
C	
u	
>	•
۵	ť.
U	J
U	7
0	0
C	כ

HEATHER  TEMP DEC C 12.2  VISIBILITY (MI) 20  LOW MID 7 HI TOTL 7:1  LOW MID 7 HI TOTL 7:1  LOW MID 3050 HI  A =43 B= .28 P= .46  . (4M) .18 (8M) .36 (16M) .66 :  (4M) 1.72 (8M) 2.94 (16M) .66 :  (4M) 0926 (8M) 2.94 (16M) .0800:  (4M) 0926 (8M) 2.94 (16M) .0800:  (4M) MS TEMP SIGA SIGE :  (DEG) (M/S) (1) (DEG) (DEG):  117. 1.98 9.59 11:1  118. 2.50 10.61 8.2 1.4:  1140. 4.70 14.56 6.9 2.2:		. DA	TE OI	DATE 07/04/77		TIME 22:00:00	: 00:0	DATE	DATE 07/04/77	7 TIME	TIME 23:00:00	00:0	DATE	DATE 08/04/77		TIME 00:00:00	: 00:0
TEMP DEG C 12.2  "VISIBILITY (MI) 20  NTHS] : LOW MID T HI TOTL T  IN : LOW MID T HI TOTL T  IN : LOW MID 3050 HI  TS A = -43 B = .28 P = .46  SON NJ: (4M) .18 (8M) .36 (16M) .66  SON NJ: (4M) 1.72 (8M) 2.94 (16M) 4.55  R : (4M) 1.72 (8M) 2.94 (16M) 4.55  R : (4M) 0926 (8M) .0865 (16M) .0800  E : WD WS TEMP SIGA SIGE  I (M) : (DEG) (M/S) (C) (DEG) (DEG)  1. : R & R & R & R & R & R & R & R & R & R				WEATH	1ER		•		WEAT	HER				WEA	THER		•
CEW POINT DEG C -7.2  VISIBILITY (MI) 20  CLOW MID 7 HI TOTL 7  CLOW MID 3050 HI  A =43 B = .28 P = .46  -7.18 MW/CM2  (4M) .18 (8M) .36 (16M) .66  (39.192M) .32 (085 RVCD DATA)  (4M) 1.72 (8M) 2.94 (16M) 4.55  (4M) 0926 (8M) .0865 (16M) .0800  WD WS TEMP SIGA SIGE  (DEG) (M/S) (C) (DEG) (DEG)  126. 2.50 10.61 8.2 1.4  129. 3.53 12.09 8.1 1.4  110. 4.70 14.56 6.9 2.2			-	TEMP DE		12.2			TEMP D	DEG C	13.3		**	TEMP	DEG C	13.9	•
: VISIBILITY (MI) 20 ::LOW MID 7 HI TOTL 7 ::LOW MID 3050 HI : A=43 B= .28 P= .46 -7.18 MW/CM2 :: (4M) .18 (8M) .36 (16M) .66 :: (39.192M) .32 (085 RVED DATA) :: (4M) 1.72 (8M) 2.94 (16M) 4.55 :: (4M) 1.72 (8M) 2.94 (16M) 0.800 :: WD WS TEMP SIGA SIGE :: (4M) .0926 (8M) .0865 (16M) .0800 :: WD WS TEMP SIGA SIGE :: (56G) (M/S) (C) (56G) (56G) :: 144 .1.46 9.27 15.1 :: 128 2.50 10.61 8.2 1.4 :: 129 3.53 12.09 8.1 1.4			DE W PC	DINT DE	J	-7.2		DEW	POINT	JEG C	-7.2		DEW	POINT	DEG C	-7.8	•
:LOW MID 7 HI TOTL 7 :LOW MID 3050 HI : A=43 B= .28 P= .46 -7.18 MW/CM2 .: (4M) .18 (8M) .36 (16M) .66 .: (39.192M) .32 (085 RVED DATA) : (4M) 1.72 (8M) 2.94 (16M) 4.55 .: (4M) ,0926 (8M) .0865 (16M) .0800 .: WD WS TEMP SIGA SIGE : (DEG) (M/S) (C) (DEG) (DEG) : 144			ISIBI	LITY	CIW.	20		VIS	IBILITY	( IM)	03		SIA :	IBILITY	CHI	20	•
: LOW MID 3050 HI : A=43 B= .28 P= .46 -7.18 MW/CM2 : (4M) .18 (8M) .36 (16M) .66 : (39.192M) .32 (0BSERVED DATA) : (4M) 1.72 (8M) 2.94 (16M) 4.55 : (4M) ,0926 (8M) .0865 (16M) .0800 : WD WS TEMP SIGA SIGE : (DEG) (M/S) (C) (DEG) (DEG) : 144 1.46 9.27 15.1 : 128 2.50 10.61 8.2 1.4 : 129 3.53 12.09 8.1 1.4	(TENTHS)	107:	_	OIW		10	71 7	10M	MID	7 HI	101	1 7	LOW	DIM	7 HI	10	TL 7:
. A=43 B= .28 P= .46 -7.18 MW/CM2 . (4M) .18 (8M) .36(16M) .66 . (39.192M) .32 (0BSERVED DATA) . (4M) 1.72 (8M) 2.94 (16M) 4.55 . (4M),0926 (8M).0865 (16M).0800 . WD WS TEMP SIGA SIGE . (DEG) (M/S) (C) (DEG) (DEG) . 144 1.46 9.27 15.1 . 128 2.50 10.61 8.2 1.4 . 129 3.53 12.09 8.1 1.4	H (M)	••	*	MI	305	O HI		LOW	I W	0 3050	IH C		TOM :	I	10 30	50 HI	•
-7.18 MW/CM2 -1 (4M) .18 (8M) .36(16M) .66 -1 (39.192M) .32 (0BSERVED DATA) -1 (4M) 1.72 (8M) 2.94 (16M) 4.55 -1 (4M),0926 (8M).0865 (16M).0800 -1 (4M),0926 (8M).0861 (16M) -1 (4M),0926 (10M).0801 (19M) -1 (4M),0926 (19M).0801 (19M) -1 (4M),09	NENTS	••	1	8=	.28 P=	94.		A= -	-11 8= -	=d 61.	.32		. A= -	.53 8=	50 P	43	•
(4M) .18 (8M) .36(16M) .66 (39.192M) .32 (0BSERVED DATA) (4M) 1.72 (8M) 2.94 (16M) 4.55 (4M), 0926 (8M) .0865 (16M) .0800  WD WS TEMP SIGA SIGE (DEG) (M/S) (C) (DEG) (DEG)  8.81 144. 1.46 9.27 15.1 137. 1.98 9.59 11.1 128. 2.50 10.61 8.2 1.4 129. 3.53 12.09 8.1 1.4 140. 4.70 14.56 6.9 2.2	RADIATION	••		-7.	18 MM/	CM2			-7.	18 MW/C	.M2			-1	.18 MM	/CM2	•
: (39.192M) .32 (OBSERVED DATA) : (4M) 1.72 (8M) 2.94 (16M) 4.55 : (4M),0926 (8M).0865 (16M).0800 : WD WS TEMP SIGA SIGE : (DEG) (M/S) (C) (DEG) (DEG) : 144. 1.46 9.27 15.1 : 128. 2.50 10.61 8.2 1.4 : 129. 3.53 12.09 8.1 1.4 : 140. 4.70 14.56 6.9 2.2	IAR DSON N	3.: (4		18 (8)	11 .3	6(16M)	99.	( W+)	8) 51.	1M) .35	1(15M)	.72	( K+)	.08 (	8M) .	15(16M)	. 24 :
: (4M) 1.72 (8M) 2.94 (16M) 4.55 : (4M),0926 (8M).0865 (16M).0800 : WD WS TEMP SIGA SIGE : (DEG) (M/S) (C) (DEG) (DEG) : 144. 1.46 9.27 15.1 : 128. 2.50 10.61 8.2 1.4 : 129. 3.53 12.09 8.1 1.4 : 140. 4.70 14.56 6.9 2.2			19.192	. (M.	9	SERVED	DATAL	(39.	192M)	37 (085	SERVED	DATAL	: (39.	192M)	.31 (0	BSERVED	DATA!
: (4M),0926 (8M).0865 (16M).0800 : WD WS TEMP SIGA SIGE :(DEG) (M/S) (C) (DEG) (DEG) : 144. 1.46 9.27 15.1 : 137. 1.98 9.59 11.1 : 128. 2.50 10.61 8.2 1.4 : 129. 3.53 12.09 8.1 1.4 : 140. 4.70 14.56 6.9 2.2	1/11*10		.H) 1.		11 2.9	4 (16M	1 4.55:	( M + )	1.23 (8	IMI 2.75	(H91)	5.25	( +W)	.43 (	8M)	62 (16M	:69:
: WD WS TEMP SIGA :(DEG) (M/S) (C) (DEG) : 144. 1.46 9.27 15.1 : 137. 1.98 9.59 11.1 : 128. 2.50 10.61 8.2 : 129. 3.53 12.09 8.1 : 140. 4.70 14.56 6.9	ISTAR		50'(W		. 08	5 (16M	1.0800:	(4M)	.1633 (8	IM) .1321	(16M)	.1034	: (4H)	.2029	8M) . 21(	07 (16M	1.2242:
: (DEG) (M/S) (C) (DEG) : 144. 1.46 9.27 15.1 : 137. 1.98 9.59 11.1 : 128. 2.50 10.61 8.2 : 129. 3.53 12.09 8.1 : 140. 4.70 14.56 6.9			0	M.S		SIGA	SIGE :	2	N.	!	SIGA		2	1	!	SIGA	SIGE
: 144. 1.46 9.27 15.1 : 137. 1.98 9.59 11.1 : 128. 2.50 10.61 8.2 1.4: 129. 3.53 12.09 8.1 1.4: 140. 4.70 14.56 6.9 2.2:	IGHT (M)			IN/SI		(DEC)	(DEC):	(050)	(M/S)		(C) (DEG)	(DEG): (DEG)	(DEC)	(N/S)		(C) (DEG)	(DEG) :
: 144. 1.46 9.27 15.1 : 137. 1.98 9.59 11.1 : 128. 2.50 10.61 8.2 1.4: : 129. 3.53 12.09 8.1 1.4: : 140. 4.70 14.56 6.9 2.2:	1.				8.81					9.82					10.9	9	
: 137. 1.98 9.59 11.1 : : 128. 2.50 10.61 8.2 1.4: : 129. 3.53 12.09 8.1 1.4: : 140. 4.70 14.56 6.9 2.2:	2.	: 14	. 4.	94.1	9.27		••	. 26	2.56	10.27	5.8	••	144.	2.52	11.38		•
: 128. 2.50 10.61 8.2 1.4: : 129. 3.53 12.09 8.1 1.4: : 140. 4.70 14.56 6.9 2.2:	.,	: 13	17.	1.98	6.59				3.33	10.01	4.7		141.	3.36			
: 129. 3.53 12.09 8.1 1.4: : 140. 4.70 14.56 6.9 2.2:	.00	: 15	.8	2.50	19.01				4.07	12.13	3.9	2.4	143.	4.52			
: 140. 4.70 14.56 6.9 2.2:	16.	: 15	.63	3.53	12.09			107.	4.57	13.15	5.3	2.8	: 153.	6.13		9 3.3	2.0:
	32.	: 14	.0.	4.70	14.56				5.99	15.39	5.5	2.0	155.	8.52			
: 144. 6.60 16.53 2.7 2.0:	48.	: 14	. 4.	09.9	16.53				7.49	16.78	3.0	1.8	155.	9.79			

4
-
VO
~
_
-
60
w
-
-
F
•
S
RE
RE
RE
T SQUARE
T SQUARE
RE

	DEGI (DEGI		(M/S)	3	(DEG)	(DEG)		(N/S)	5	(DEG)	(DEG)
21.2			2.07	66.6	5.9	0		1.85	11.04	14.3	7.7
15.8	8 .9	••	2.58	10.23	5.5	3.5	••	2.50	11.33	6.6	5.4
11.8		••	3.21	10.72	5.1	3.1		3.38	11.87	6.9	3.8
8.7		••	3.99	11.63	4.7	2.7	••	4.56	12.89	4.8	2.7
6.9		••	4.97	13.22	4.4	5.4	••	91.9	14.60	3.3	1.9
4.8		••	6.18	15.55	4.1	2.1		8.32	16.79	2.3	1.4
4.1		••	7.02	16.71	3.9	1.9		9.92	17.32	1.9	::
BU*100	00 RI		20/00	OTH/02	BU*100	A.		20/00	DTH/D2	80*100	R.I.
.370		-	.2355	.2418	1.297	00		.3433	.2698	1.301	00.
689.	3 .00	••	1465	1617.	3.028	00.		.2318	.2374	2.503	000
12.187	2000	••	1160.	.1736	991.9	00.	••	.1565	1727	3.969	00.
.508	Ī	••	.0938	6960.	11.354	00.		.0794	.0587	3.688	00.

2	•	1	L
	١		•
í	4	9	
ľ	(		3
9	C		,
þ	Ļ	١	
			'
1	Ļ	Ļ	;
			)
į	C		3

	••		••	•	. 0			••	.35 :	ATAI :	7.97:	0593:	16E :	DEG):	"	••		2.2:	2.8:	2.1:	2.4:	
03:00		2.2	.8.3		TOT	H	.22	12	1641 1	RVED D	1(191)	(16H).	IGA S	) (93)		5.1	4.0	3.9	4.7	5.3	4.4	
- I ME	~	3 :	٠ ن	11) 20	Ŧ		12 P=	MM/CH	.75(	COBSE	11.54	.0805	EMP	(C) (DEG) (DEG):	8.25	8.79	9.37	11.20	15.01	12.72	12.82	
: DATE 08/04/77 TIME 02:00:00 : DATE 08/04/77 TIME 03:00:00	WEATHE	EMP DEG	JINT DEG	LITY OF	MID	MID	8=0	-7.95	31 (8M)	14) .62	.29 (BM)	3: (4M).1233 (8M).0805 (16M).0593:	HS 1	(N/S)				4.12				
ATE OR			DEN PC	VISIBI	3	MO	10. =		· (H)	39.192	4M1 4.	4M).12	OM			.86	.96	. 46	.90	13.	22.	
0:0		••		••	5:10	1:	<b>4</b>	••	38 : (	TA): (	.47:	373: (	GE :	(DEG):(DEG)		••		2.2:				
0:00:0		9.9	8.		TOTL	=	. 12		16M) 2.	EVED DA	16M154	7: (4M) .1877 (8M) .1743 (16M) .0373: (	IGA SI	0) (9		4.9		3.1				
TIME		51 3	- 3	1 20	H	3050 H	P= .	MW/CM2	.24* (1)	(OBSER	1.37*	1743	TEMP SI	(DEC)	96.0	1.43	.75	12.27	59	64.0	89.	
11/40	WEATHER	4P DEG	AT DEG	ITY (M)	2 01	MID	3= .31	-7.60	(8M)	06.	(8M)	(8M)	ds TE	(5)	Ů.			4.44 12				
E 08/C		TE	N POIN	SIBILI	Ξ		•05		10,	.192M]	1 .63	1.1877		( W/S)								
. DAT	••		: DE	: VI	*COM	· LOW	: A=		# (4M	: (39	. (4N	. (4M	9	: CDEG		: 137		: 129.				
00:0					7L 6				.21	DATA	1 .55	1,1787	SIGE	(DEG):(DEG)				5.8:				
01:0		15.6	-7.8	20	10	IH C	64.	SM2	( H91 ) 1	SERVED	M91) 1	1 (16M	SIGA	(DEG)		16.0	13.8	10.9	7.2	3.1	3.0	
TIME -	HER.		၁ 9	CIMI	IH 9	305	-78 P=	1 MM 09	1. 1	52 (08:	11 .3	11.167	TEMP	5	11.42	11.83	11.82	12.66	13.32	14.70	16.33	
DATE 08/04/77 TIME 01:00:00	MEATHER	TEMP DEG C	POINT DI	VISIBILITY (MI)	MID	HI	58 B=78	-7.	.06 (81	92M1 .	.26 (8	(4M),1500 (8M),1	WS TEMP SIGA SIGE : WD	(M/S)		1.80	2.32	3.12	4.51	68.9	8.14	
DATE			DEM	VISI		-			( M+)	(39.192M)	(H)	(4M)	Q¥ :	-		164.	160.	157.	162.	160.	162.	
••	••		••					. NOI	. ON	•		•					••	••	••	••	•	
					CLD (TENTHS	CLD HT (M)	EXPONENTS	NET RADIATION	RICHARDSON NO.		(1/11*10	USTAR		HEIGHT (M)	1.	2.	*	.8	16.	32.	48.	

		SM :	TEMP		SIGE	••	NS	TEMP	SIGA	SIGE	••	MS	TEMP	SIGA	SIGE
HEIGHT (M)	=	(N/S)	(3)	(050)	(DEG)		(M/S)	(0)	(DEG)	(DEG)		(M/S)	(3)	(DEG)	(DEG)
1.0		1.21	11.60	29.3	33.1		2.51	96.6	4.1	8.		2.39	8.65	4.4	2.5
2.0		1.69		9.61	19.3	••	2.90	10.32	4.3	1.0		2.80	8.92	4.5	5.5
4.0	••	2.37	11.95	13.1	11.3	••	3.34	10.11	4.4	1.2	••	3.27	44.6	4.5	5.4
8.0		3.33		8.8	9.9	••	3.85	12.27	4.5	1.5	••	3.81	10.38	4.5	5.4
16.0		4.68		5.9	3.8	••	45.4	14.34	4.7	1.8	••	4.45	11.87	4.5	5.4
32.0	•	6.57		3.9	2.2		5.11	16.68	4.8	2.3	••	5.20	13.28	4.6	5.4
48.0		8.01		3.1	9.1		5.56	16.62	4.9	5.6		5.69	15.61	4.6	5.4
		20/00	DTH/D2	8U*100	۳ -		ZO/NO	DTH/D2	BU*100	R		20/00	DTH/D2	BU*100	<u>.</u>
4.0		.2736	.1240	1.210	00.		.1587	.3345	1.656	00.		.1693	.2533	1.318	00.
8.0		.1920	.1202	2.377	00.		\$160.	.2877	4.267	00.	••	8860.	.2125	3.234	00.
16.0		.1348	.1127		00.	••	.0527	.1939	8.597	00.	••	1150.	.1309	5.814	00.
39.5*		1810.	61111.	805.01	00.		0288	.0219	5.072	00.	••	.0300	.0163	2.982	00.

	-	
4		
٠	•	
-	c	
2	3	
C	3	
u	J	
7	•	
0		
u		
33	ō	
a	0	
-		

	••	••	••	••	••	••	••	••	-		. 0		=		••	••	3:	4:	1:	3:
00:				0				111	DATA	1.	: (4M).4387 (8M).4259 (16M).4040:	SIGE	(DEC)				4.3	3.	2.	2.
TIME 06:00:00	9.	8.		TOT	=	56		( M9	VED	16M)	164	!			7.6	1.9	5.5	4.2	3.4	5.6
ME O	01	-	20		_	. = 0	I/CH2	0561	BSER	111	129	TEMP SIGA	90	0	51	90	. 59	16	64	88
T TER T	2 9	ر 9	CIN	Ī	^	35 6	39 M		01		41.42	TEM	5	10.9	=	11.0	11.65	11.	12.4	15.1
DATE 08/04/77	M 0	NT DE	ITY	10	MIC	B= -,	-10.	2 (8)	•	18) 9	181	S S	(N/S)		.22	.23	7.32	.57	14.	111
08/	TE	104	IBIL	Σ		.32	i	0.	192M	0.	.438				2	9	7	80	01	12
DATE		DEW	VIS	MO	LOW	A= -		(M4)	(39.	(4H)	(4H)	9	(DEG): (DEG)		148.	143.	139.	144.	143.	145.
	••	••	••	0:10	••	••	••	37 :	. (A)	. 53:	553:	3E	1: (9		••	••	14.4:	:9.4	.7.0	7.7:
TIME 05:00:00				DIL					D DAT	1 (1	M).0	SI								
05:	8.9	-8.9	0	-	ī	.53	M2	H91)	ERVE	(16	91)	SIGA	DEG )		24.	27.	21.0	17.	12.	8
TIME	v	J	11 2	Ŧ		= d	MM/C	.27	(085	1.73	0260	TEMP	3	.30	.75	69.	10.32	3.52	3.74	10.1
ATHER	DEG	DEG	W) A		AID	34	7.95	(8M)	.07	( BM)	(8M)	=								
DATE 08/04/17	TEMP	DINT	ILIT	MIO		3 8=	•	91.	241	.39	43: (4M).0518 (8M).0560 (16M).0653: (4	ES	(N/S)		.7.	0.1	1.35	1.7	5.9	4.1
TE 0		EN P	1518		3	3		E	61.6	1 (W	M) . 0	0			.0	.1.	136.	.8.	.4.	.5.
. DA			<b>&gt;</b>	: COM	. 10	: A=	••		: (3	.: (4	.: 64		: ( DE		: 13	: 13				
00:				٥				.72	DATA	5.32	.0843	SIGE	(DEG): (DEG)				1.7:	3.4	2.1	3.6
TIME 04:00:00	4.	•3		TOT	_	37		( W 9	VED (	16M)	(8M), 0899 (16M), 0843:	!			5.1	4.1	2.8	4.5	4.4	4.7
ME O	6	-8	20		Ī		I/CM2	46(1	BSER	1 19	) 66	SIGA		3	•			0	_	
-	3	2 9	IN	H	•	.24 P=	-7.95 MW	-	50 (0	4 .	41.08	TEMP	3	6.2	9.9	7.1	8.8	10.4	11.4	11.7
DATE 08/04/77	TEMP DEG C	DEM POINT DEG (	VISIBILITY (MI)	MID	MID	8=	-7.	3 (8)	•	18) 1	7 (8)	#S	(N/S)		.82	.50	3.41	89.	.34	.07
08/	TE	104	IBIL	I		-8 10.		.23	39.192MI	4M) 2.51	14M) . 1057				-	7		3	2	9
DATE		DE	VIS	*C 04	104	A=		( 4M)	(39.	(M+)	(4H)	9	:(0EG)		19.	77.	78.	97.	110	123.
•• ••	••	••	••			••	 Z	0	••	••	••	"		"	••	••	••	••	••	••
				THS)	=	s	AT 10	Z		10			Ē							
				TEN	===	ENT	RADIATION	ROS		(1/11*10	USTAR		HEIGHT (M)	-	7	4	80	16	32	48
				רם	CLD HT (M)	EXPONENTS	NET R	ILCHARDSON NO.		=	Š		FEI							

4
-
DA
0
60
w
-
-
-
FIT
S
W
SQUARES
4
2
0
S
-
AS
4

		SM :	TEMP	P SIGA	216E	•	2	EU -	SIGA	316E	••	CH	TEMP	SIGA	SIGE	••
HE IGHT (M)	î	: (M/S		-	(DEG)	••	(M/S)	(3)		(DEG)	••	(M/S)	(3)		(DEG)	•
1.0		1.4			1.2		.50	9.54	38.1	32.7		4.31	10.99	6.6	8.9	
2.0		: 1.89	9 6.74	4.2	1.5	••	.72	19.6	30.3	25.8	••	5.16	11.06	7.9	7.0	••
4.0		: 2.4			1.1	••	1.04	9.76	24.1	20.3	••	6.18	11.21	6.3	5.5	••
8.0		3.1			2.1	••	1.50	10.02	19.5	16.0	••	7.39	11.47	5.0	4.3	••
16.0		. 4.0			5.4	••	2.16	10.46	15.2	12.6	••	8.85	11.94	4.0	3.4	••
32.0		: 5.2	_		5.9	••	3.11	10.95	15.1	6.6	••	10.59	12.59	3.2	2.7	**
48.0		0.9 :			3.2	••	3.85	10.93	10.6	8.6	••	11.77	12.84	2.8	2.3	••
		20/00 :	DTH/DZ	BU*100	8.1	-	20/00	DTH/02	80*100	R.I.	-	20/NO	0TH/02	BU*100	R.I.	
4.0		: .2087	1	2.673	00.	-	.1293	.0781	4.018	00.	-	.3722	.0789	+111	00.	! "
8.0		: .1346		5.451	00.	••	1660.	.0683	6.755	00.	••	.2227	+110.	.288	00.	••
16.0		: .0868	.1568	8.468	00.	••	1190.	.0485	9.236	00.	••	.1333	.0563	.633	00.	••
39.2*		: .0456		4.937	00.	••	11156	.0269	10.174	00.	••	.1063	.0344	1.434	00.	**

A-198

(1/L)*10		( CPM) . 4671 WD M ( DEG) ( M/ 148. 5. 142. 6. 143. 7. 141. 9. 141. 9.	SS T SS	TEMP SIGA (C) (DEG) (C) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG) (DEG)	SIGE (DEG) 4.4 3.8 3.1 2.5	(DEG) (DEG) (DEG) (DEG) (DEG)	(8 % % % % % % % % % % % % % % % % % % %	15.76 15.76 15.76 15.24 15.23 15.03	8 108 8 108 8 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	SIGE (DEG)	066) 151. 146. 146.	(M/S)	16.74 17.46 17.46 17.46	7.5 6.1 6.1 7.5	5166 : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) : (066) :
HEIGHT (M)		-			4660		5.97 6.99 7.88 8.31 9.49	5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.	81-0044		1	7.12 8.25 9.39 10.05	18.48 18.37 17.64 17.74 17.07	Carrier S	4 m m m
1.		-	A SHE SELECTION		4667		6.99 7.88 8.31 9.49	55 55 54	-0044			9.39 10.05 10.73	17.64		4 6 6 4
• •		-1	- 10 to 10 to 1		662		8.80 9.49	51 24	1044			10.05	17.46	404.5	3.9.9
.91	•	-1	95 13	60	7		6.46	14	. 4				16.75	3.	3.4:
48.	-									-		41.11			
LEAST SQUARES		FITTED DATA	DATA	1											
HEIGHT (M)		CN/S)	30	\$16A (DEG)	(DEG) :	(M/S)			DEG) (	(DEG)	· · ·	M/S)	100	DEG) (	DEG) :
1.0		4.80	12.64	8.8	8.7 :	5.6	.68 15.	69 1	0.5	4.6	. 6	-	8.25	0	5.7 :
2.0		5.54	12.66	1.4	7.0 :	6.23	23 15.	99	8.8	4.5	: 7.	.42 18.18	18	1	5.2 :
0.4		6.38	12.70	1.9	5.7	6.84		59	7.5	6.5		15 18.06	90	6.7	. 8 . 4
0.91		8.46	12.88	7.7	3.7	~	24 15.	27	2.3	4.4			**	- 0	. 0 .
200		9.75	13.03	3.6	3.0	6		86		4.3	10.		**		3.7 :
48.0		10.59	13.07	3.2		6	-	98	1:,	4.3		1.45 16.	.80	. 6	3.5 :
		20/00	DTH/02	8U*100	. 18	ZQ/NQ	Z 07H/02	!	BU*100	12	: DU/DZ	207H70 20		BU* 100	RI
4.0		.3018	.0274	.037	. 00.	.2127	70199		023	10	2577	'			. 02 :
8.0	••	.1738	.0252	-	. 00.	1168	•			+0	1417	04		- 1111-	. 10
16.0		1001	.0209	2	. 00.	.0641	1			60	0779	1			15 :
39.2*	••	.0887	.0175	.890	: 00.	.043	6100 1	•	. 811°	03	: .025	26 010		436	: 15.

		DATE 08,	08/04/77 WEATHER TEMP DEG POINT DEG	A A	10:00:00	8	DATE O	08/04/77 WEATHER TEMP DEG	TT TIME THER DEG C C	E 11:00:00 24.4 -6.1	00:0			D8/04/77 WEATHER TEMP DEG	G C 2	E 12:00:00 25.8 -5.6	00:0
CLD (TENTHS) CLD HT (M) EXPONENTS NET RADIATION RICHARDSGN NO- USTAR	A	VISIBILII  OM  =11 B= 14 B= 04  39.192N) 13 13	VISIBILITY (MI)  M MID  =11 B= .06  37.33 M  4M)04 (8M) -  39.192N)83 (  4M)13 (8M) -  4M)13 (8M) -	1 43.0.4	3 101 HI 7 2 2 2 16M) RVED (16M)	620 : 620 : DATA) : -17:		MID MID OO BE OO B	CI FILLIC	60 HI 76 HI 76 HI 76 W/CM2 32(16M) 0BSERVED D. 44 (16M)	7620 66 DATA 1-533		2		- 0 .	2 TD HI 12 12 (164) (164)	7620 7620 38 DATA) 126
HEIGHT (M)	: ND	-	MS T	EMP C.	IGA EG.)	SIGE :	: WD	WS (W/S)	TEMP (C)	SISA (DES)	SIGE :	1	L DEG	WS M/SI	TENP	SIGA	SIGE (DEG)
1. 2. 4. 8. 16. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18				22.01 20.77 20.77 20.84 20.84 20.53 20.10	9.08	444	177. 172. 168. 172. 170.	6 . 00 7 . 49 7 . 90 8 8 . 55	24.18 23.76 22.76 22.78 22.38 21.96 21.96	31 34 34 34 34 34 34 34 34 34 34 34 34 34	4400	1	174. 169. 164. 168. 165.	7.25 8.38 9.34 9.86 10.38	25.02 23.36 23.36 23.05 22.55 22.55	7.22 1.22 1.00 1.00 1.00 1.00 1.00 1.00 1	4400
HEIGHT (M)		WS (W/S)	TEMP (C)		SIGA DEG) (	SIGE :	SM (M/S		CH	SIGA DEG1	SIGE (DEG)		(N/S)	20	C)	SIGA DEG 1	SIGE (DEG)
0.75		7.08			v. 8 - 1	60%	0001			18.2	4.1		6.99 7.58 8.23	24.		14.1	3.8
16.0 32.0 48.0		10.03	20.50 19.89 15.89	6 6 7	0000	4 0 00 0	60 60	. 21		15.4			9.68	23.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10.3 9.5 9.1	
		Z0 /00	DTH/DZ	90	*100	RI :	20/00	Z 07H/02		8U*100	RI		20/00	DTH/DZ		8U*100	RI
4.0 8.0 16.0		1335	0742	056		24	1638.	8 - 0908 1 - 0755 4 - 0449		107	01		.2240	0998		078 221 455	03

4
AT
٥
ED
>
ER
BS
8

0 :: 18 :: 1A) :: 213:	SIGE: (DEG): 4.6: 4.8: 5.7:
762 762 763 763	
HI 12 12 12 12 15 16 16 16 16 16 16 16 16 16 16 16 16 16	TEMP SIGA (C) (DEG) 26.69 26.54 9.2 25.36 7.8 25.77 7.3 25.50 6.7 25.13 7.0 24.83 6.8
MW/C 09 (08S	TEMP (C) (C) (26.69 26.54 25.36 25.77 25.50 25.13 24.83
110 113 8M) 8M) 8M)	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
# 6 6 4 6 4 6 4 6 4 6 4 6 4 6 4 6 4 6 4	NS (M/S) 7.39 8.44 9.40 10.03 10.63 11.16
0 1619	0.5 %54564
304 3033	172 163 165 165 165
20 20 4 ATA1 ATA1 5062	SIGE: WD (DEG):(DEG) : 172. : 167. 4.8: 167. 4.9: 165. 5.3: 166.
1 2 1 0 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
HI CM2 9016 9016 7 11	000
5 P P P P P P P P P P P P P P P P P P P	TEMP SI3A (C) (DEG) 26.38 26.09 11.1 24.75 11.2 24.99 11.0 24.14 11.3 24.00 11.2
MID 11.66 (8M) (8M) (8M)	
0 8= 0 07 2 07 2 05 2 05 2 05	MS (M/S) 7.03 8.01 9.96 10.24
3 FORE	WD DEG) 191. 186. 181. 182. 181.
520 520 38 540 640	SIGE: WD (DEG):(DEG) : 191. : 186. 4.1: 181. 4.5: 184. 5.2: 182. 6.2: 181.
11 76 11 76 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16 11 16	
CM2 19(1) 19(1) 19(1) 19(1) 19(1)	× 0
22 26 36 36 36 36 36 36 36 36 36 36 36 36 36	TEMP (C) 25.78 25.61 24.23 24.42 24.06 23.57 23.38
45.3 1.8 1.8 1.8 1.8	
09 B 07 92M)	MS (M/S) 7.43 8.52 9.45 9.88 110.38 110.72
## 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10EG) 178. 174. 170. 173. 171.
10 NO NO 110 NO	HEIGHT (M)  1. 2. 4. 8. 16. 32. 48.
ENTS BADIA RDSG 7L)*	6H 16. 32. 48.
ICHA I	포
	EXPONENTS: LOW MID HI 7620: LOW MID HI 7

LEAST SQUARES FITTED DATA

	••	MS			SIGE	••	SM	TEMP		SIGE	••	SM	TEMP	SIGA	SIGE	
HEIGHT (M)		(M/S)	3	(DEG)	(DEG)	••	(M/S)	3	( DEG )	(DEG)		(M/S)	3	( DEC)	(DEC)	_
1.0	"	7.19	!	15.4	2.6		6.72	25.89	11:1	4.3	-	7.01	26.31	9.1	3.5	!
2.0	••	7.76	25.24	14.5	3.0	••	7.28	25.78	1111	4:4	••	7.64	26.24	8.6	3.8	
4.0	••	8.37		13.6	3.4	••	7.88	25.57	11:1	4.6	••	8.33	26.10	8.1	4.2	
8.0	••	9.03		12.7	4.0	••	8.53	25.18	1111	4.7	••	9.08	25.86	7.6	4.6	
16.0	••	9.14		12.0	4.7	••	9.24	24.57	11.2	4.9	••	9.89	25.45	7.2	2.0	
32.0	••	10.50		11.2	5.4	••	10.00	23.93	11.2	2.0	••	10.78	24.96	6.7	5.4	
48.0	••	10.97		8.01	6.6	••	10.48	54.09	11.2	2.1	••	11.33	24.90	6.5	5.7	
	"	Z0/N0	DTH/DZ	80*100	<del>م</del> 		20/00	DTH/02	BU*100	. F	-	20/00	DTH/DZ	BU*100	1.8	!
4.0	"	.2111	.21110911	068	03		- 2089 -	0890	075	03	-	. 2390	0531	040	03	!
8.0	••	.1139	0754	195	10	••	- 11111	0734	212	09	••	.1302	0446	114	09	
16.0	••	*190*	0439	168	38	••	- 0612	0422	417	37	••	. 0000	0275	236	18	
39.5*	••	.0212	6100	086	+11-		• 0175	.0013	.062	• 00	••	.0331	0087	374	52	
*	JBSER	* OBSERVED DATA	A								-					

Preceding Page BLANK - FILMED

### APPENDIX B

# RAWINSONDE AND PILOT BALLOON DATA DUGWAY PROVING GROUND

Note Rawinsonde data were obtained during the morning hours and the pilot balloon data were obtained during the afternoon hours.

ADIOSCNDE DATE 14/02/77 TIME 05:00:00 LOCATION DPGWV

1									
(H)	PRESS (MB)	WIND DIR	U (M/S)	(*10)	TEMP (DEG C)	DEWPT (DEG C)	MR (GM/KG)	TH# (DEG K)	07H7DZ (*1000)
0	876.1	355.	4.6	.000	-1.5	-5.3	2.9	282.6	000
81.	867.3				2.9	-3.3	3.5	288.1	67.886
175.	857.3				3.9	-3.5	3.4	290.1	42.864
275.	846.8				4.2	-3.2	3.6	291.5	37.228
305.	843.7	353.	10.1	.200	4.0	-3.5	3.5	291.6	29.332
609	812.5	354.	12.0	.122	2.2	-5.9	3.0	292.7	16.597
. 416	782.5	352.	11.7	.078	4.	-8.3	2.6	293.9	12.325
921.	781.8				4.	-8.4	2.6	294.0	12,310
1055.	768.8				9.	-10.0	2.3	295.6	12.244
1219.	753.3	353.	10.5	.048	1	-11.3	2.1	295.8	10.828
1413.	735.2				-2.3	-12.8	1.9	296.1	9.539
1523.	725.0	357.	10.3	.037	-2.8	-13.6	1.8	296.7	9.257
1828.	9.169	354.	11.5	.038	6-4-	-15.0	1.7	297.7	8.223
1905.	8.069				-5.5	-15.3	1.7	297.8	7.976
2132.	671.1	350.	12.5	.037	8-4-	-16.5	1.6	301.1	8.646
2153.	669.3				-4.8	-16.6	1.6	301.3	8.658
2741.	620.8	351.	14.2	.035	-8.0	-22.4	1.0	334.1	7.823

CATE	TIME	PLACE
	15:00:0	O DPGWV
		WIND SPEED
(M)	(DEG)	(M/S)
76.	354.0	7.2
146.	357.0	7.5
204.	355.0	7.1
259.	358.0	6.9
314.	348.0	7.8
369.	347.0	8.4
424.	354.0	8.3
479.	360.0	7.9
533.	2.0	4.9
588.	1.0	3.2
643.	356.0	3.6
698.	356.0	4.0
753.	360.0	3.7
808.	1.0	6.4
863.	359.0	10.1
918.	359.0	7.1
972.	359.0	8.9
1027.	356.0	10.3
1082.	353.0	7.1
1137.	352.0	7.5
1192.	352.0	7.7
1247.	350.0	8.8
1302.	351.0	8.5
1356.	352.0	7.6
1411.	356.0	6.9
1466.	2.0	6.9
1521.	2.0	6.7
1576.	360.0	7.1
1631.	1.0	8.0
1686.	3.0	8.9
1741.	4.0	9.4
1796.	4.0	
1851. 1905.	3.0	9.8
1960.	1.0	9.4
2015.	1.0	9.8
2017.		

15.910 18.443 13.562 11.901 10.438 8.840 9.008 19.268 52.469 9.636 82.936 47.794 44.766 26.906 19.623 9.047 8.449 (CCCT \*) (DEG K) 276.5 290.3 291.4 292.9 294.5 294.6 296.4 296.1 288.6 297.0 301.3 304.0 306.7 304.4 305.9 305.1 (SM/KG) 9.11.99 222222 2.1 2.1 DATE 15/02/77 TIME 05:00:00 LOCATION DPGWV (DEG C) -13.8 -17.6 -21.8 -6.8 -11.3 -11.3 -11.5 -14.6 -6.4 -11.5 -26.0 DEWPT -28.9 (DEG C) -11.4 -7.0 33.0 3.9 1.2 -1.4 -3.7 9.4--14.5 1:1 1.4 .3 6.9--1.1 -9.2 -:-1.-(\*10) .065 0000 .046 .054 040 .045 .046 .044 .033 .037 190 .071 0. 1.7 6.3 10.2 8.5 15.0 15.2 15.8 (M/S) WIND DIR 299. 344. 341. 347. 346. 348. 348. 346. 345. 339. 337. 338. PRESS 878.3 870.0 862.4 850.0 768.3 673.3 622.9 576.0 845.6 814.4 784.3 748.8 726.9 658.8 842.7 1.669 647.8 563.2 553.6 (MB) 531.8 RADIOSONDE 15286. 1523. 1828. 2132. 2305. 2436. 2741. 3 145. 079. 263. 914. .609 3350. 3655.

DAT 15/02		
) HGT.	WIND DIR (DEG)	WIND SPEED
76. 146.	37.0 34.0	3.2 3.4
204.	23.0	2.1
259.	358.0	1.1
314.	237.0	.2
369.	170.0	.9
424.	72.0	•8
479.	354.0	•5
533. 588.	259.0 73.0	1.4
643.	4.0	1.3
698.	299.0	1.5
753.	263.0	.6
808.	278.0	.7
863.	290.0	3.2
918.	287.0	3.1
972.	279.0	2.7
1027.	337.0	4.5
1082.	308.0	6.1
1137.	316.0 323.0	6.3
1192.	318.0	7.1
1302.	313.0	7.1
1356.	314.0	7.3
1411.	319.0	8.0
1466.	320.0	9.9
1521.	322.0	9.6
1576.	324.0	8.0
1631.	323.0	9.8
1686.	317.0	10.7
1741.	312.0 312.0	11.6
1851.	316.0	12.5
1905.	321.0	13.6
1960.	324.0	12.9
2015.	324.0	12.5

43.311 12.975 12.237 9.892 7.648 7.140 7.947 3.731 4.293 7.570 3.727 7.783 2.257 2.405 3.135 2.236 DTHV/DZ (\*1000) 186.204 (DEG K) 288.3 297.0 30008 302.2 304.5 306.6 308.3 309.8 294.0 294.6 8.462 304.7 309.2 310.3 292.6 MR (GM/KG) 1.9 1.4 1.2 1:1 DATE 16/02/77 TIME 05:00:00 LOCATION DPGMV DEWPT (DEG C) -26.5 -9.6 -11.8 -12.8 -15.1 -17.4 -27.8 -25.6 -8.1 -29.5 -25.7 -26.2 -8.4 -25.1 -29.1 -19.7 -20.1 (DEG C) -3.6 9. -2.9 TEMP 0.4-3.6 5.65.22 4.4 2.5 -1.3 -1.6 -2.3 -6.0 -8.4 -10.0 -10.7 -14.7 20/00 .079 .000 .008 .000 .000 .013 .033 .026 .105 .033 000 -.023 U (W/S) 2.8 3.8 5.3 7.3 1.6 8.6 9.2 13.2 WIND DIR 205. 298. 304. 301. 313. 325. 140. 185. 164. 304. 277. 319. (48) 631.8 578.0 850.0 814.2 767.8 727.7 601.0 562.8 PRESS 845.1 670.3 4.649 674.7 861.7 842.8 555.7 RADIOSCNDE 2741. ~ (W) 144. 1090. 1218. 1523. 1828. 2132. 2185. 3558. 304. 609. 2437. 2654. 3045. 3350. 3959. 3654.

\* VIRTUAL POTENTIAL TEMPERATURE

2

4

0

3.816

DATE 16/02/7		PL ACE DPGWV
HGT. (M)	WIND DIR W	IND SPEED
76.	351.0	3.0
146.	297.0	1.2
204.	209.0	1.6
259.	186.0	2.4
314.	201.0	2.6
369. 424.	196.0	3.4
479.	187.0	4.5
533.	187.0 183.0	4.5
588.	185.0	4.5
643.	190.0	3.0
698.	219.0	1.6
753.	236.0	1.6
808.	257.0	1.9
863.	276.0	2.1
918.	294.0	2.5
972.	304.0	3.7
1027.	295.0	5.4
1082.	298.0	7.2
1137.	302.0	8.2
1192.	296.0	9.4
1247.	297.0	9.8
1302.	297.0	9.8
1356.	294.0	10.3
1411.	294.0	9.4
1466.	292.0	8.9
1521.	291.0	9.6
1576.	289.0	9.8
1631.	287.0	10.7
1686.	287.0	10.5
1741.	287.0	10.8
1796.	288.0	11.2
1851.	290.0	10.0
1905.	293.0	10.3
2015.	297.0 301.0	11.2

2.355 10.057 2.868 2.901 2.116 3.775 1.944 1.815 2.097 3.285 3.817 30.658 20.939 31.362 3.586 3.696 3.216 3.041 3.066 (\*1000) 58.021 171.18 (DEG K) 301.2 303.3 304.1 307.8 285.9 296.4 302.6 302.4 305.6 6.562 292.6 295.2 298.3 300.5 300.6 335.1 306.6 309.2 281.1 309. (GM/K3) 00-0004 DATE 17/02/77 TIME 05:00:00 LOCATION DPGWV (DEG C) -10.0 -16.9 -20.7 -23.4 -27.3 -7.2 -12.3 -7.6 -7.4 -8.5 -26.2 -29.5 -31.8 -34.1 DEWPT -10.2 -14.4 -16.5 -35.0 -36.0 -37.1 (DEG C) -10.4 -3.0 2003 6.5 3.2 8.6 9.8 5.0 TEMP 8.7 -1.7 -4.1 -5.4 -6.3 -8.4 -13.3 -14.6 -16.8 990. .030 .105 610. (\*10) 0000 .059 .062 .052 .033 .086 -.026 70/00 1.0 7.5 0.1 12.1 9.81 21.0 1.0 4.7 20.3 21.2 (M/S) = 0 MIND DIR (086) 305. 355. 324. 298. 290. 301. 308. 303. 298. 296. 330. 303. CALM 336. 650.0 699.5 673.2 871.0 782.5 721.3 575.9 544.3 842.7 PRESS 858.8 847.8 824.3 813.8 812.2 634.3 623.1 (48) 814.7 299.1 RADIOSONDE 914. 2741. 148. 304. 2437. 2 34. 254. 593. .609 3250. 580. 1827. 1910. 0 2604. 3046. 3654. 3779. .6568 2112

3

2

B-8

0ATE 17/02/77	TIME 15:00:0	PLACE O DPGWV
HGT. WI	IND DIR (DEG)	WIND SPEED (M/S)
76.	332.0	4.0
146.	335.0	4.0
204.	353.0	2.9
259.	14.0	3.3
314.	17.0	4.0
369.	21.0	4.2
424.	27.0	4.5
479.	27.0 23.0	4.5
533. 588.	12.0	3.8
643.	359.0	4.3
698.	349.0	4.9
753.	346.0	5.1
808.	339.0	4.5
863.	329.0	4.4
918.	319.0	4.5
972.	309.0	5.0
1027.	300.0	5.3
1082.	294.0	5.2
1137.	295.0	5.5
1192.	299.0	6.3
1247.	300.0	6.8
1302.	302.0	7.3
1356.	300.0	7.4
1411.	297.0	6.3
1466.	297.0	5.4
1521.	305.0	5.2
1576.	309.0	4.9
1631.	310.0	4.5
1686.	307.0	4.4
1741.	298.0 290.0	4.5
1851.	289.0	5.6
1905.	290.0	6.3
1960.	295.0	6.3
2015.	297.0	6.8

14.932 1.993 2.960 8.501 3.778 1.960 2.583 2.440 1.981 1.824 1.712 1.367 2.586 25.308 9.963 7.733 8.708 2.051 21.221 116. (\*1000) 344.4 289.9 8.462 295.3 298.5 301.6 306.0 307.9 297.3 300.0 330.0 300.4 302.1 303.7 308.1 308.6 292.6 294.9 297.1 300.8 306.4 297.9 1.667 (GM/KG) 1.0 1.9 1.9 DATE 18/02/77 TIME 05:00:00 LOCATION DPGWV (DEG C) -10.9 -11.8 -12.4 -13.1 -22.7 -22.3 -33.7 -39.6 -7.2 9.6--25.3 -42.0 -13.4 -3.1 -23.5 -34.9 -37.3 4.44-(DEG C) TEMP -6.2 6.9--8.0 -11.1 80.00.09 4.4 4.--2.4 9.4--8.4 -8.6 -16.1 -.010 0000 .039 .033 .039 0000 .056 .079 .089 .076 .052 003 .052 .023 ( \*10) 20/00 12.1 (W/S) 3.8 6.0 8.0 8.0 4.8 7.1 8.7 9.0 9.1 WIND DIR (DEG) 10. 354. 8 352. 337. 330. 321. 310. 316. 324. 329. 328. 322. 316. 314. 873.4 862.0 850.9 850.0 845.3 853.8 784.4 700.3 631.8 515.5 814.4 728.8 727.7 8889 623.3 61119 599.1 552.9 (MB) PRESS 673.8 648.1 531.1 RADIOSONDE 1828. 3350. 143. 914. 2132. 2437. 2637. E 2742. 2893. 259. 517. 609 1523. .646 3046. 3959. 4263.

3

B-10

DATE	TIME	PLACE
18/02/77	15:00:	OO DPGWV
	IND DIR	
(M)	(DEG)	(M/S)
		2
76.	7.0	2.5
146.		3.4
204.	353.0 346.0	3.7
314.	357.0	3.4
369.	14.0	3.4
424.	6.0	3.1
479.	359.0	2.4
533.	359.0	2.0
588.	352.0	2.2
643.	350.0	2.1
698.	351.0	2.2
753.	351.0	2.2
808.	348.0	2.2
863.	345.0	2.5
918.	341.0	2.6
972.	331.0	2.9
1027.	329.0	3.0
1082.	328.0	3.0
1137.	328.0	3.6
1192.	328.0	4.0
1247.	328.0	4.7
1302.	326.0	5.8
1356.	323.0 321.0	6.7 7.2
1466.	320.0	7.3
1521.	318.0	7.6
1576.	319.0	7.6
1631.	322.0	7.0
1686.	325.0	6.7
1741.	333.0	8.0
1796.	336.0	8.9
1851.	333.0	9.7
1905.	330.0	9.7
1960.	332.0	10.7
2015.	332.0	10.9

7	PRESS	WIND DIR	>	20/00	TEMP	DEWPT	M.	*AH1	DTHV/DZ
3	(MB)	(DEG)	(M/S)	(*10)	(DEG C)	(DEG C)	(GM/KG)	(DEG K)	(*1000)
0		270.	3.6	000	•2	-5.8	2.9	85.	000.
163.		286.	12.7	.558	-1.0	-8.8	2.3	285.5	1.976
305.	835.0	289.	10.5	155	-2.1		1.9	85.	1.590
451.						-14.2	1.5	85.	1.187
609	803.3	297.	0.6	6+00-	1-4-	-14.4	1.6	286.1	1.117
914.		306.	8.0	033	-7.4	-14.7	9.1	286.4	1.020
1219.	742.8	313.	8.7	.023	-10.2	-15.0	1.6	•	.596
1459.					-12.4	-15.3	1.6	9	.527
1523.		322.	10.5	.059	-12.8	-15.9	1.5	287.0	3.843
1673.	700.0	328.	11.6	.073	-13.9	-17.2	1.4	287.3	2.659
1828.	685.8	332.	11.9	610.	-15.1	-18.5	1.3	287.7	2.129
2132.		339.	11.3	020	-17.4	-	1:1	8	2.353
2437.		345.	1.6	072	9.61-		6.	6	2.664
2526.					-20.3	-24.6	8.	6	2.001
2741.	8.909	346.	7.8	043	-22.2	-26.6	.7	6	1.128
3046.	581.8	342.	7.6	007	-24.8	-29.5	9.		1.454
3350.		335.	7.6	0000	-27.4	-32.4	4.		1.337
3655.		321.	8.0	.013	-30.1	35.3	• 3	290.7	.839
3720.	530.2				-30.6	-35.9	.3		2.271
3959.		309.	8.9	.030	-32.7	-38.2	• 3	291.2	1.192
4133.		306.	•	.017	-34.2		.,	291.4	1.305

\* VIRTUAL POTENTIAL TEMPERATURE

DATE 24/02/7	TIME 77 16:00:0	
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76.	34.0	6.5
146.	32.0	6.0
204.	30.0	4.9
259.	29.0	5.0
314.	29.0	5.3
369.	25.0	4.5
424.	2.0	3.6
479.	330.0	3.1
533.	303.0	2.2
588.	277.0	1.8
643.	284.0	1.8
698. 753.	304.0 292.0	2.1 2.1
	282.0	2.7
808. 863.	298.0	3.1
918.	318.0	3.5
972.	323.0	4.6
1027.	319.0	5.4
1082.	312.0	5.3
1137.	311.0	5.4
1192.	312.0	5.6
1247.	316.0	5.1
1302.	316.0	4.9
1356.	314.0	5.1
1411.	312.0	4.6
1466.	303.0	4.9
1521.	291.0	4.6
1579.	282.0	4.5
1631.	279.0	4.9
1686.	281.0	5.4

RADIOSCNDE DATE 25/02/77 TIME 06:00:00 LOCATION DPGWV

KADIC	KADIUSUNUE	DAIE 25/02/11		1 ME 00.0	Uo. UO. UO. LUCAI IUM	I TOM OPONA	> 1		
7 (1)	PRESS (MB)	WIND DIR	(8/W)	(*10)	TEMP	DEWPT (DEG C)	MR (GM/KG)	THV*	UTHV/DZ (*1330)
0	869.8	340.	2.7	000				79.	10
131.	855.5				-4.0	-9.5	2.2	281.8	
181.		337.	8.0	.293				31.	.88
305.		349.	7.6	032		-		82.	.36
584.								83.	.63
.609		346.	4.6	.059				83.	2.372
863.						2		83.	.08
.416		358.	10.0	.020		-		83.	.98
1219.		2.	11.0	.033		-		84.	.750
1255.					-12.8	-14.5		84.	1.793
1523.		. 9	11.4	.013		. 9		84.	N
1678.		111.	11.4	000		7.		84.	2.139
1818.						-		85.	+
1828.		.91	16.6	.347				85.	N
1938.							8.	85.	6.019
2132.		21.	12.3	141		-	.7	96.	2
2437.		18.	13.4	.036		-	9.	96.	0
2741.		13.	13.9	910.		111	.5	87.	9
2987.						-	4.	88.	2.162
3046.		12.	12.6	043	-26.4	-33.5	4.	38.	N
3550.		12.	16.0	190.			•3	88.	20
3655.		16.	17.4	.133		0.20	.2	89.	•
3678.							.2	89.	0
3959.		21.	17.9	910.		3	• 5	89.	
4129.	500.0	23.		025	-35.1	-44.3		90.	•

DATE 25/02/		
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76. 146.	346.0 348.0	5.6 4.5
204.	358.0 357.0	4.9
314. 369.	357.0 359.0	6.3 7.2
424.	2.0 357.0	6.0 5.7
533. 588. 643.	350.0 349.0 349.0	6.3 6.9 8.0
698. 753.	347.0 345.0	9.4 9.8
808.	345.0 344.0	11.6
918. 972. 1027.	342.0 338.0 338.0	10.0 7.3 5.8
1082.	334.0 334.0	4.7 5.2
1192.	328.0 331.0	4.5
1302. 1356. 1411.	341.0 341.0 341.0	5.3 5.4 5.4
1466.	346.0 349.0	6.0 5.8
1576.	349.0 349.0	5.8 6.7
1686. 1741. 1796.	349.0 349.0 349.0	7.2 7.2 6.7

1.973 1.059 16.395 2.385 1.364 7.818 8.437 1.566 1.160 19.952 5.552 5.308 5.740 2.339 2.830 6.821 4.210 9\*4\*9 6.936 2.760 80.128 16.383 6.322 (\*1000) 16.405 (DEG K) 297.9 301.4 303.8 305.0 287.4 288.8 293.1 294.0 294.6 295.5 562 296.4 296.8 297.1 297.4 300.3 288.2 293.4 303.0 304.2 291.1 (GM/KG) 2.5 2.0 1.9 1.8 1.5 44600 6. 6. 0 0 DATE 28/02/77 TIME 08:00:00 LOCATION DPGWV -11.2 -17.9 -10.3 -15.7 -22.8 -31.1 -64.3 -16.7 -62.1 -56.2 6.44-DEWPT -11.8 -13.5 -15.4 -21.0 -24.4 -23.7 -23.3 -62.8 -24.1 (DEC C) 1.--2.9 -2.6 -13.7 1.5 -11.6 -13.8 -16.0 -21.9 TEMP -.2 6. 1.4 -.5 -5.0 -6.5 8.9--8.9 -19.6 -6.3 7.9--14.0 -15.3 -17.2 .016 .039 0000 .282 .000 .050 .026 .023 .013 .026 .059 -.026 .036 .023 .003 (01 \*) -.053 -.059 20/na 6.7 6.4 6.5 7.3 8.8 13.0 2.1 5.5 4.9 8.7 9.2 (N/S) 4.1 MIND DIR (DEC) 183. 172. 196. 226. 257. 271. 278. 276. 270. 267. 271. 269. 280. 279. 281. 873.6 721.8 619.0 1.695 558.3 546.5 1.608 750.1 503.5 PRESS ( MB) 850.0 841.0 838.3 119.5 774.3 700.0 694.3 6.199 9.149 8.909 592.5 524.6 869.3 689.3 616.7 500.0 RADIOSONDE 2132. 2713. 305. 1523. 3350. 3 220. 331. 609 914. 968. 1219. 1828. 1885. 1764. 2437. 2741. 2864. 3046. 3496. 3959. 3655. 4263.

DATE	TIME	PLACE
28/02/7	7 15:00:0	O DPGWV
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	150.0	7.4
146.	143.0	5.7
204.	148.0	4.6
259.	155.0	4.1
314.	158.0	3.7
369.	156.0	4.0
424.	156.0	4.0
479.	165.0	3.7
533.	175.0	4.)
588.	185.0	5.2
643.	189.0	6.3
698.	194.0	7.2
753.	199.0	7.6
808.	206.0	6.7
863.	215.0	5.5
918.	215.0	6.3
972.	215.0	6.5
1027.	230.0	5.4
1082.	249.0	4.5
1137.	251.0	4.5

5.920 1.923 3.882 7.895 7.353 3.100 3.470 3.729 2.130 1.869 1.835 2.117 3.996 810.9 8.306 (DEG K) (\*1000) 4.164 280.0 293.9 292.1 292.3 284.7 286.2 286.3 286.6 287.2 288.4 290.2 293.3 294.4 295.9 296.5 297.0 297.3 297.4 283.5 295.3 297.6 THV\* (GM/KG) 3.5 3.4 3.2 3.1 2.3 2.3 2.3 2.3 2.2 6.1 1.5 1.7 DATE 01/03/77 TIME 05:00:00 LOCATION DPGWV (DEG C) -1.00 DEWDT -7.8 -23.9 -6.8 -11.4 -11.7 -12.2 -14.2 -16.2 -10.7 -21.2 -111-1 -18.5 -26.5 -31.1 (D 530) TEMP -11.6 -13.6 -15.6 -10.5 -10.8 -22.6 -2.9 -3.9 6.4--5.3 -6.5 4.1--9.2 -10.1 -2003--27.7 -3.1 -26.1 -16.6 -17.8 -25.1 (+10) .016 .000 .036 -.216 660. .102 .010 .067 000. .062 .089 .062 690 ---.201 -.034 11.0 12.6 5.01 (N/S) 10.3 11.0 12.1 4.4 1.6 4.6 6.5 8.0 18.5 13.4 1.91 WIND DIR 347. 341. 331. 335. 354. 325. 171. 162. 207. 213. 319. 174. 194. 213. PRESS (MB) 861.3 797.4 723.4 858.8 853.8 756.9 737.4 700.0 887.8 9.459 615.8 579.4 556.4 5111.7 850.0 802.8 8.187 108.9 631.3 658.9 603.8 533.5 524.3 PADIOSONDE .367. 2437. 2596. 2741. 620. 756. 828. 3046. 3 69. 305. 556. 609 764. .416 219. 2132. 3655. 3959. 3350. 3784.

B-18

DATE		TIME	PLACE
01/03/	77 15:	:00:00	DPGWV
HGT.	WIND I	DIR W	IND SPEE
(M)	(DE	G1	(M/S)
76.	23.	.0	5.2
146.	19.	.0	4.0
204.	13.	.0	3.9
259.	4.	.0	4.0
314.	353	.0	4.0
369.	346	.0	3.8
424.	340.	. 0	2.8

3.818 4.114 3.956 1.242 2.028 1.877 1.162 3.874 2.284 1.850 1.032 1.304 1.269 1.340 3.761 1.002 04401 DTHV/D2 (\*1000) IDEG KI 285.9 289.3 284.1 234.9 287.3 288.3 288.2 290.5 8.062 290.2 290.6 291.2 233.3 284.5 584.9 289.1 291.7 282.7 THV\* (GM/KG) 1.5 1.3 1.0 1.2 DATE 02/03/77 TIME 06:00:00 LOCATION DPGWV (DEG C) -10.2 -10.6 -12.4 -18.9 -19.7 -24.0 -28.9 8.5--15.0 -32.5 -35.0 -3.5 4.4-4.9--8.3 DEWPT -16.7 -18.1 -23.3 (DEG C) -18.4 -22.5 TEMP 13.3 -14.0 -15.4 -17.5 -3.0 -7.1 -10.2 -13.6 -16.6 -21.9 -11.7 -26.4 -30.1 -.059 .082 -.092 -.148 0000 .744 .030 .066 .003 20/00 ( \*10) -.027 -.150 -.036 19.5 17.7 17.1 8.50 13.5 0.6 1.9 8.8 0.8 2.5 4.0 (W/S) WIND DIR (DEG1 335. 300. 318. 329. 342. 350. 344. 348. 355. 351. 357. 351. 352. 352. 345. 850.0 835.3 706.0 700.0 678.3 8.099 651.6 642.8 80509 528.8 1.567 563.8 575.7 6.155 PRESS 758.8 134.8 600.2 826.7 764.7 (MB) RADIOSCNCE 1828. 2027. 2132. 2234. 2437. 86. 224. 305. 1523. 3046. 3198. 3350. 3 .609 2673. 3655. .416 974. 2741. 4053. 3959.

B-20

DAT 02/03		
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76. 146. 204. 259. 314. 369. 424. 479. 533. 588. 643. 698.	349.0 349.0 348.0 348.0 348.0 346.0 345.0 341.0 340.0 340.0	10.4 9.0 7.5 7.8 7.8 8.1 9.0 8.5 8.0 8.1 9.0
753. 808. 863. 918. 972. 1027. 1082. 1137. 1192.	340.0 339.0 337.0 337.0 337.0 336.0 337.0 337.0	8.5 9.0 9.2 10.0 10.0 9.9 9.5 17.5 26.0

32.649 55.467 8.825 2.949 5.590 10.661 11.438 4.396 4.658 2.230 1.538 1.324 1.564 9.101 3.187 2.587 2.390 1.893 DIHVIDZ (\*1000) 3.000 4.503 13.029 29.224 2.23 (PEG K) 286.1 287.0 287.2 268.0 239.8 291.3 292.1 293.5 294.0 295.0 297.8 231.1 283.6 284.0 234.3 287.6 239.3 562 290.6 297.1 238.0 TAVET (CM/KS) 1.5 64465 1.3 DATE 03/33/77 TIME 05:00:00 LOCATION DPSWV (DEG C) -12.4 -11.7 -31.5 -36.6 -39.0 -8.0 -17.3 -17.3 -23.0 -38.5 -8.6 -9.2 -17.3 -10.8 -15.4 -19.0 -20.0 -26.1 -39.6 DEWPT CEG C1 -3.7 -5.8 -7.9 -10.0 -12.5 -17.3 -19.0 -19.9 -24.8 -27.2 -28.7 -2.7 -19.8 TEMP -2.7 -10.2 1.4--10.3 -15.1 -15.3 4.91--16.3 -16.4 1000-.084 .089 184. .023 .030 033 .330 910 .-.003 (01\*) 20/110 4.4 3.9 6.5 6.6 9.6 (M/S) 2.3 WIND DIR (DEG) 300. 296. 349. 326. 303. 306. 312. 317. 337. 316. 313. 865.2 856.3 851.3 850.0 740.4 656.6 605.3 8.955 (MB) 832.2 800.4 736.2 711.5 2002 683.7 681.3 660.3 630.5 581.3 557.3 534.5 PRESS 646.3 581.1 RADIOSCADE 305. 914. 2741. 3 1648. 1878. 1854. 2437. 3043. 81. 139. 173. 2132. 2264. 0 1262. 523. 2090. 3046. 3350. 3655. 3959. 4140.

B-22

DATE 03/03/		
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	154.0	2.2
146.	132.0	1.8
204.	123.0	1.8
259.	140.0	2.1
314.	170.0	1.9
369.	214.0	1.6
424.	250.0	1.3
479.	286.0	1.2
533.	318.0	.9
588.	348.0	.7
643.	21.0	1.0
698.	31.0	1.4
753.	13.0	1.3
808.	351.0	1.3
863.	343.0	1.2
918.	332.0	1.4
972.	320.0	1.4
1027.	315.0	1.4

DTHV/D2 (\*1000) (DEG K) 286.0 286.0 286.6 289.0 289.9 291.2 284.3 284.9 287.3 288.0 288.1 288.3 288.4 289.4 293.0 293.6 2883 282.8 290.3 284.2 THV (GM/KG) 1.8 6.1 1.9 3.0 2.3 1.7 1.5 1.4 1.0 3.1 DATE 04/03/77 TIME 05:00:00 LOCATION DPGWV (DEG C) -34.9 -5.3 -6.0 -6.0 -8.3 -10.7 -26.1 -27.3 -37.7 -15.3 -17.4 -17.6 -22.8 -31.0 -35.9 -13.1 -13.4 -28.2 DEMPT -14.3 (DEG C) -23.6 9.91-TEMP -2.2 -2.3 -3.0 6.4--5.0 -9.5 -12.1 -16.8 -25.4 -27.5 -13.1 -11.8 -14.3 -21.2 -21.8 -22.3 -25.8 .039 .036 .030 0000 .016 .000 .026 .036 .020 .030 .033 20/00 (\*10) 0000 .020 11.6 8 8 8 8 8 8 8 9.6 10.2 12.8 13.7 15.2 (M/S) MIND DIR (066) 340. 352. 347. 359. 354. 351. 349. 355. 359. 348. 850.0 700.0 601.3 559.8 553.8 536.6 583.6 836.4 804.8 803.3 711.8 617.3 (MB) 773.9 1.441 715.5 661.8 660.3 633.9 608.4 RADIOSONDE 219. 2132. 2741. 2828. 690. 3428. 178. 305. 609. 625. 914. 563. 3046. 3350. 2635. 1655.

2.129 2.244

1.993 1.047 1.801

2.183

3.689

2.934

2.162

2.096 4.510

8.747

1.060 4.722

. 743

-2.600

4.362

104.4

194.4

5.435 2.713

\* VIRTUAL POTENTIAL TEMPERATURE

3.066

294.5

-40.0

0000-

14.9

360.

3959.

·160.

DATE 04/03/7		PLACE O DPGWV
HGT. (M)	WIND DIR (DEG)	WIND SPEED (M/S)
76.	12.0	8.6
146.	5.0	9.3
204.	1.0	6.5
259.	. 3.0	8.3
214.	360.0	8.9
369.	360.0	9.2
424.	3.0	9.0
479.	3.0	11.1
533.	360.0	11.9
583.	357.0	11.9
643.	355.0	12.5
698.	355.0	12.2
753.	356.0	11.0
808.	356.0	10.9
863.	357.0	13.2
018.	357.0	16.0
972.	1.0	14.8
1027.	4.0	11.8
1082.	6.0	8.9
1137.	12.0	8.0
1192.	13.0	8.2
1247.	8.0	9.0
1302.	8.0	8.8
1355.	8.0	8.5
1411.	3.0	10.0

1.556 1.526 .000 62.894 28.739 27.873 4.403 7.432 12.288 13.045 1.582 2,062 2.022 1.942 1.813 5.168 2.329 2.234 1.847 (\*1000) 181.9 (DEG K) 286.3 294.4 301.3 301.7 301.8 302.0 302.3 302.9 293.9 294.9 298.4 304.3 305.9 297.2 3000 300.9 304.1 306.4 THV\* (SM/KS) 2.3 1.7 1.7 1.6 1.3 .5 OPGWV 5 DEWPT -6.1 -12.5 -13.6 -18.1 -19.1 -19.8 -22.2 -29.8 -34.4 -33.5 -16.1 -17.6 -17.4 -32.5 -31.5 -34.7 -34.1 -20.0 -20.4 -33.5 PATE 07/03/77 TIME 05:00:00 LOCATION (DEG C) -12.8 -13.6 TEMP 1.7 -2.5 -8.5 -20.6 4.0 7.1 7.2 4.0 1.3 -1.2 -3.7 -111.7 -19.7 7.4 -10.9 -17.3 1.9--20.6 10/07 -.016 .026 .026 0000 000. .007 .003 .015 000. .013 640. .030 .026 .044 .291 -.033 .007 2.1 8.3 8.0 7.5 7.8 8.7 0.3 10.5 12.9 14.2 (M/S) 7.4 0.1 WIND DIR 185. 225. 204. 245. 248. 258. 262. 249 262 271 272 264 264 PRESS (MB) 872.5 850.0 6.608 791.8 776.3 751.5 723.6 596.4 598.8 500.0 848.3 840.6 8.969 683.3 6.019 644.8 620.1 563.3 550.6 500.3 28.7 507.7 780.4 0.001 ADIOSCNOE 3145. 3655. 2 213. 230. .609 795. 914. 957. 523. 1985. 3959. 219. 2741. 4373. 190 828 2132 3046 3483 4263

POTENTIAL TEMPERATURE

VISTUAL

1

DAT 07/03		TIME:00:0	PLACE O DPGWV
HGT.	WIND D		IND SPEED
76.	152.	0	4.6
146.	154.	0	4.4
204.	152.	0	4.3
259.	157.		5.3
314.	168.		5.0
369.	171.		6.4
424.	177.		7.5
479.	188.		7.1
533.	192.		7.5
588.	201.		7.2
643.	207.		7.1
698.	207.		6.8
753.	208.		6.0
808.	211.		6.9
863.	215.		7.5
918.	226.		7.0
972.	232.		6.1
1027.	221.		9.0
1082.	215.		12.0
1137.	224.		9.9
1247.	232.		3.0
1302.	237.		7.9
1356.	235.		7.8
1411.	244.		8.2
1466.	245.		8.8
1521.	240.		8.1
1576.	237.		3.0
1631.	238.		8.0
1686.	237.		7.9
1741.	236.		8.5
1796.	235.		10.0
1851.	235.	0	9.8
1905.	235.	0	10.2
1960.	247.		11.0
2015.	263.		11.6

RADIOSCNDE DATE 08/03/77 TIME 05:00:00 LUCATION DPGWV

1	SSand	MIND DIR	= ;	26/00	E C	E N D	X.	* >	DTHV/DZ
(X)	(MB)	(930)	(M/S)	(*10)		(DEG C)	(GM/KG)	(DEG K)	(*1000)
0	866.8	90.	2.5	0000		8		0	00
28.	3					14.		+	3.
130.					10.5	-17.1	1.2	297.0	23.061
162.	850.0	211.	9.8	.377			1.1	7.	6.7
223.	3				-	8	1.1	3	5.2
305		200.	8.2	028	0		1:1	8	-
.609	5	220.	10.1	.062		6	1.0	;	
914.	9	238.	10.7	.020		0	1.0	-	0
1084.	0						1.0	2.	. 7
1219.	1.	5		C		-	6.	2.	1.865
1523.		264.	12.3	.033		0	1.0	-	
1749.		269.	13.3	*	9.	5		3.	-16.792
1823.	3.	-	•	10	-:1	26.	9.	3	.833
2132.		9	14.0	.030	-2.7	2	• 5	3.	
2158.						28.	.5	3.	
2437.	-	265.	17.0	610.	•	.6	• 5	. 4	
2741.	617.3	260.	20.7	.122	-7.7	-30.5	• 5	304.8	1.786
3046.	3.	256.	23.0	.075	0	-	• 5	5	19.
3236.						2.	+.	5.	2.074
3350.	0	253.	22.5	910	2.	*	4.	5	1.083
3450.	3.				-13.5	5	• 3	. 9	-
3655.	548.2	249.	-	026			.3	0	2.244
3959.		249.	22.6	.030	13	5	٠.	9	.08
4141.					5		٤.	0	•
4263.	505.4	248.		.030		0	0	1.	
4343.	500.0	248.	23.3	025	-21.3	-2005	0.	337.2	

DATE	TIME	PLACE
08/03/77	13:00:00	DPGWV
	IND DIR W	
(M)	(DEG)	(M/S)
	22.0	
76.	32.0	3.5
146. 204.	32.0 29.0	3.0 2.6
259.	22.0	3.4
314.	23.0	4.2
369.	19.0	4.6
424.	7.0	4.8
479.	354.0	4.2
533.	353.0	3.7
588.	344.0	3.5
643.	343.0	3.5
698.	342.0	3.5
753.	344.0	3.8
808.	344.0	4.0
863.	342.0	3.8
918.	335.0	3.2
972.	325.0	3.2
1027.	319.0	3.9
1082.	314.0	4.0
1137.	312.0	4.0
1192.	310.0	4.0
1247.	310.0	3.8
1302.	314.0	4.0
1356.	314.0	4.0
1411.	314.0	3.9
1466.	323.0	3.8
1521.	303.0	4.0
1576.	283.0	5.1
1631.	278.0	5.2
1686.	276.0	4.9
1741.	278.0	4.0
1796.	277.0	4.8
1851.	275.0	5.0
1905.	275.0	5.1
1960.	276.0	5.8

RADIOSONDE DATE 09/03/77 TIME 05:00:00 LOCATION DPGWV

~ E	PRESS (MB)	WIND DIR	(A/S)	00/0Z (*10)	(DEG C)	DEWPT (DEG C)	MR (GM/KG)	THV* (DEG K)	DTHV/DZ (*1000)
0.	19	145.	5.1	000	9.9	-7.7	2.5		.000
.66	850.8				8.9	-11.4	1.9	295.7	33.444
0	50.	199.	9.2	.383		-11.6	<b>6.1</b>		4.
5	40.					-13.5	1.6		20.272
0	29.	194.	8.9	015	•	-14.5	1.5		.2
0	.66	215.	10.6	.056		-17.3	1.2		.3
2	88.				7.5		1.1		.5
-	70.	228.	11.2	.020	•	-19.3	1:1		
01	53.					20.	1.0		3.133
21	42.	238.	11.5	.010			1:1		
1255.	39.				5.0	-19.7	1.1	303.5	10.802
52	14.	245.	12.0	910.		0	1:1		1.050
69	00	247.	12.4	.024		0	1:1		1.018
82	88.	248.	12.8	.029		0	1:1		.973
13	62.	248.	15.8	660.	-2.8	:	1.0		.937
30	48.					-	1.0	304.5	1.171
43	37.	247.	19.2	.111	-5.5	-21.5	1:1		.815
74	12.	247.	1.61	003	8.	21.	1:1	305.1	1.530
04	.68	246.	17.1	990	•		1.2	305.4	•
35	.99	241.	18.5	.346		-21.2	1.2	305.7	.983
51	54.				-14.9		1.3	306.0	1.452
65	44.	237.	18.6	.003	-16.3		1.3	305.9	445
89	27.						1.4	306.0	•165
6 8	22.	241.	20.6	990.	-18.7	-20.1	1.5	306.6	10.274
07	14.				6	6	1.6		
26	01.	244.		680.	-20.1	-20.3	1.5	308.5	4.788
28	.00	243.	22.1	480	-20.5	0	1.5		6.

\* VIRTUAL POTENTIAL TEMPERATURE

DATE		
09/03/7	7 16:00:	OO DPGWV
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	267.0	12.8
146.	265.0	9.1
204.	256.0	5.9
259.	252.0	8.5
314.	221.0	3.3
369.	226.0	2.5
424.	250.0	7.0
479.	254.0	8.0
533.	257.0	7.0
588.	257.0	5.0
643.	260.0	3.4
698.	256.0	7.0
753.	256.0	12.9
808.	259.0	11.2
863.	257.0	22.9
918.	256.0	29.9
972.	256.0	33.0
1027.	258.0	40.0
1082.	261.0	38.0
1137.	266.0	36.0
1192.	267.0	35.6
1247.	268.0	18.0
1302.	268.0	8.0

Note: Radiosonde data for the morning of 10/03/77 was not obtained.

DAT	the state of the s	
10/03	/77 13:00	:00 DPGWV
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	345.0	16.0
146.	345.0	20.0
204.	346.0	23.0
259.	345.0	23.0
314.	346.0	21.5
359.	347.0	16.5
424.	350.0	11.0
479.	349.0	11.9
533.	348.0	13.0
588.	348.0	12.5
643.	347.0	10.0
698.	348.0	23.0
753.	348.0	38.0

RADIO	AD IO SONDE	DATE 11/03/77		TIME 05:0	:00:00 LOCATION	TION DPGWV	>		
7	PRESS	WIND DIR	ם	20/00	TEMP	DEWPT	Æ	THV*	I
E .		(DEG)	(M/S)	(01*)	(DEG C)	(DEG C)	(GM/KG)	(DEG K)	(0001+)
0	77.	360.	3.0		4.4			19.	000
85.	67.						2.0	30.	6.0
4	50.	348.	12.6	.039				32.	.2
-	46.				-3.6			33.	3.9
0	44.	356.	12.4	036	•			83.	
377.	36.				-4.2	-13.8		33.	
0	23.							94.	.22
0	12.	*	13.4	.033			1.5	85.	
0	82.				9.9-			36.	.75
02	.69						•	37.	•
21	51.	10.	14.4	910.			•	37.	
43	30.							88.	•
52	22.	8.	14.5	.003	-10.8	-20.0		38.	1.138
16	00	8	15.0	.021			6.	88.	.835
82	93.	.6	15.1	• 015			œ.	88.	.866
46	83.							88.	
13	.99	.6	15.3	100.			• •	89.	
38	44.						.2	91.	8
43	40.	7.	16.0	.023		-37.8	.2	91.	
2741.	614.5	.9	15.6	013	-19.3	-39.8	•2	291.8	2.150
82	07.				20.		.2	.16	.3
93	98.						.2	92.	60.
04	90.	10.	18.1	.084			•2	96	6.6
25	73.					-40.5	• 2	.66	14.144
35	65.	14.	21.6	.110			• 5	32.	8.30
57	.64					-39.5	•2	. +0	6.0
18	34.				-18.0		•2	.50	4.455
82	31.					-40.1	• 5	96.	5.70
93	23.				17.	1-04-	• 2	37.	11.777
26	.00	.6	36.9	.169	-19.2	-42.3	.2	.60	6.583
1									

DATE 11/03/7	TIME 7 15:00:	
	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	339.0	5.2
146.	339.0	2.8
204.	343.0	2.4
259.	351.0	3.0
314.	348.0	3.3
369.	349.0	4.2
424.	351.0	5.2
479.	352.0	4.5
533.	355.0	3.8
588.	359.0	5.1
643.	4.0	6.0
698.	4.0	5.5
753.	2.0	4.5
808.	6.0	4.1
863.	12.0	4.7
918.	16.0	4.7
972.	17.0	4.6
1027.	20.0	5.5
1082.	23.0	5.1
1137.	8.0	4.8
1192.	15.0	5.0
1247.	12.0	5.5
1302.	5.0	6.3
1356.	5.0	7.0
1411.	19.0	8.0
1466.	26.0	8.9
1521.	26.0	10.0
1576.	26.0	11.0
1631.	27.0	13.0
1686.	27.0	13.2
1741.	22.0	13.0
1796.	25.0 31.0	15.0 16.0

RADIDSCNDE DATE 14/33/77 TIME 05:00430 LOCATION DPSWV

~ E	PRESS (MB)	WIND DIR	U (8/8)	(*10)	TEMP (DEG C)	(DEG C)	MR (GM/KG)	THV*	01HV/DZ (*1335)
0	19	305.	2.1	000		-11.7		79	10
-	50.	316.	5.1	.273		0		83	8.5
30	47.					-10.2	2.1	283.6	26.707
90	29.	342.	4.1	051	-3.1			85	64.6
3	26.				-3.1			85	.11
0	97.	341.	4.1	000.	-5.1	-13.6		86	.56
-	97.				-5.1	-13.6	1.7	36	0
-	67.	327.	2.5	052	-7.7	-16.7	1.3	98	•
-	67.				-7.7	-16.7	1.3	86	10.71
21	37.	326.	2.7	1000	-10.7	-16.7	1.4	86	0.
8	22.				-12.3	-16.8	1.4	86	_
52	08.	340.	4.0	.043	-13.4	-19.5	1.2	86	
2	.00	343.	4.4	.041	-14.2	-20.9	1.0	87	1.29
8	85.					-23.7	8.	87	
2	.18	328.	5.1	.034	-15.6		9.	87	5.269
9	60.					-42.2	1.	89	•
3	54.	304.	9.9	640.	-17.0		.2	39	•
3	27.	296.	7.4	.026	5		.3	89	
9	.80				-		• 5	90	
4	02.	293.	7.4	.000	-22.2	-31.0	• 2	06	
4	77.	284.	7.1	010	5		• 5	90	.686
-	67.				.9		• 5	90	
35	54.	267.	8.8	.056	1.	-32.0	• 5	91.	2.79
65	31.	257.	11.7	.095	6	-34.2	4.	92.	•
68	28.				6		*.	92.	
.656	508.8	255.		.062	-32.2	-36.9	• 3	292.4	.70
8	00	5	13.3	024	3.	-38.0	• 3	0	.93

DATE 14/03/		
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76.	329.0	3.6
146.	330.0	5.8
204.	331.0	7.0
259.	331.0	6.7
314.	332.0	5.7
369.	329.0	4.4
424.	329.0	3.7
479.	330.0	4.7
533.	331.0	5.9
588.	329.0	4.8
643.	310.0	3.0
698.	306.0	2.1
753.	323.0	3.4
808.	320.0	5.2
863.	310.0	4.1
918.	270.0	2.1
972.	218.0	2.5
1027.	219.0	2.0
1082.	266.0	1.3
1137.	276.0	2.1
1192.	291.0	3.9
1247.	299.0	5.0
1302.	292.0	4.5
1356.	290.0	4.0
1411.	290.0	3.9
1466.	290.0	3.8

19.480 71.183 3.801 3.692 .555 3.324 2.398 1.729 .515 3.744 4.077 1.047 10.991 DTHV/DZ (\*1000) 2.665 5.858 .551 11.517 5.541 IDEG KI 286.0 286.5 287.7 288.8 283.6 290.6 290.9 291.1 291.2 1.967 285.9 288.7 291.5 291.7 292.0 8.462 295.0 296.8 THV\* (GM/KG) 1.8 1.8 1.7 3 4 - - - 0 0 9. .5 DATE 15/03/77 TIME 05:00:00 LOCATION DPGWV (DEG C) -15.3 -11.9 -12.0 -12.1 -13.6 -14.8 -20.1 -22.9 -26.5 -28.2 -31.2 -33.7 DEWPT -14.6 -16.9 -18.9 -21.8 -24.7 -28.3 -35.0 -28.5 -31.1 (DEG C) TEMP -4.8 -5.0 -9.6 -10.9 -11.9 -14.6 -20.1 -22.8 -23.3 -25.2 9.9--1.3 -.2 4.--1.2 -27.1 -3.1 -23.3 -24.8 (\*10) -.007 .000 .000 .016 -.010 .036 .030 910. 940. .046 20/00 -.043 (M/S) 2.6 12.1 6.9 7.9 8.6 7.1 8.2 11.0 > WIND DIR (DEG) 110. 201. 183. 193. 204. 210. 223. 229. 233. 236. 241. 213 238 853.2 804.6 777.3 774.2 744.3 775.7 678.2 661.0 634.6 609.3 585.0 5.095 545.8 1.889 585.7 (MB) 850.0 561.2 538.2 836.1 RADIDSCNDE 1523. 1523. 1695. 1828. 3350. 3 2132. 144. 173. 3655. 305. 609 883. 914. 2741. 3037. 3363. 939. 3593. 1068 3959

B-38

DATE 15/03/7	TIME 7 15:00:0	O DPGWV
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76.	185.0	5.4
146.	186.0	4.3
204.	190.0	3.8
259.	193.0	5.8
314.	191.0	7.0
369.	189.0	6.5
424.	180.0	5.9
479.	172.0	5.0
533.	178.0	4.1
588.	188.0	5.2
643.	180.0	5.4
698.	179.0	5.2
753.	183.0	5.0
808.	185.0	4.9
863.	187.0	4.2
918.	183.0	3.0
972.	180.0	2.0
1027.	175.0	1.8
1082.	174.0	2.2
1137.	172.0	2.8
1192. 1247.	162.0	3.9
1302.	170.0	4.0
1356.	183.0	4.7
1411.	188.0	5.2
1466.	196.0	4.9
1521.	199.0	4.8
1576.	197.0	5.8
1631.	196.0	7.7
1686.	199.0	6.8
1741.	217.0	5.0
1796.	224.0	6.9
1851.	227.0	7.9
1905.	232.0	9.0
1960.	234.0	9.0
2015.	236.0	10.0

RADIOSCNDE DATE 16/33/77 TIME 05:00:00 LOCATION DPGWV

2	W	WIND DIR	>	20/00	TEMP	DEWPT	Æ	THV*	DTHV/DZ
3	(MB)	ш.	(M/S)	(+10)	(DEG C)	(DEG C)	(6M/KG)	(DEG K)	(*1000)
0	5	190	1.0	000.	-3.6	-12.5	1.7	81.	0
	57.				4		1.5	85.	7
4	57.	246.	3.7	186	2		1.4	85.	3.1
-	46.				1	-15.4	1.4	00	35.908
~	40.				0.	-16.2	1.3	87.	1.8
0	33.	211.	2.2	+60	6.1	-23.3		89.	6.2
4	28.					-27.7	• 5	.16	8.0
0	02.	198.	3.6	940.		-27.8	.5	89.	7.1
-	72.	198.	5.0	9+0.	-1.0	-27.8	• 5	0	7
15	.64				-2.7	-27.9	• 5	93.	
21	43.	206.	0.9	.033	-3.1	-28.1	.5	6	.2
52	15.	217.	6.5	910.	6.4-	-29.0	.5	95.	.2
57	10				-5.1	-29.1	• •	95.	5.779
68	00	2	1.9	.012	-6.1	0	• 5	95.	.5
82	87.	2	7.0	.022			.5	96	.2
13	.09	228.	8.2	.039	8.6-		*.	.96	1.819
43	35.	2	10.4	.072		-31.6	*.	97.	1.660
69	14.					2	4.	0	1.789
14	10.	2	12.4	990.		2	*.	.16	.899
.940	86	223.	14.8	.079	-17.4	-33.2	4.	298.0	1.456
25	70.						*.	98.	.2
35	63.	223.	19.0	.138	6		.2	98.	-
47	53.				0		-:	66	9.
65	40.	224.	24.0	.164		0	.2	00	0
13	34.				-		•3	01.	
68	18.				-	6	• 5	03.	6
66	18.	223.	29.4	.178	2.	8	• 3	0	.2
-	10.				2.	6	1.	33.	.5
22	.00	222.	32.2	105	3	0	9.	C	9

DATE 16/03/7		
HGT.	WIND DIR (DEG)	WIND SPEED
76. 146. 204. 259. 314. 369. 424. 479. 533. 588. 643. 698. 753.	9.0 5.0 359.0 243.0 202.0 205.0 215.0 216.0 201.0 196.0 196.0	3.9 2.8 1.2 .3 1.2 2.2 3.0 3.6 4.3 4.8 4.7 4.8 5.1
808. 863. 918. 972. 1027. 1082. 1137. 1192. 1247. 1302. 1356. 1411.	200.0 203.0 201.0 201.0 203.0 205.0 207.0 212.0 214.0 218.0	5.3 5.5 5.9 6.0 6.1 5.8 5.5 6.8 7.0 6.2 7.5 8.2

RADIOSCNDE DATE 17/03/77 TIME 05:00:00 LOCATION DPGWV

13	(MB)	WIND DIR	(M/S)	00/0Z (*10)	(DEG C)	DEWPT (DEG C)	MR (GM/KG)	THV*	07HV/0Z (*1000)
0	1 5	215.	3.1	000	2.4	-4.6		288.7	000
53.	0	231.	10.7	1.434			2.3		
74.	-				•	-10.4		289.7	
9	8				3.7	-8.6		291.6	21.352
305.	824.0	220.	8.0	107	3.0	-9.5	2.3	292.3	.8
0	4				2.0	6.6-		293.2	4.707
0	3.	223.	7.4	020	6.	-10.4			.198
-	3.	232.	6.7	023	-2.0	-12.0			061.
21		248.	1.9	020	6.4-	-13.5			.142
44	3.	,			-7.1	-14.6	1.7	293.3	190
52	.9	265.	5.7	013	-7.8	-14.6	1.7	293.4	.761
65	0	266.	5.7	000.		-14.6	1.8	293.4	.523
82	6	268.	5.5	600	-10.5	-14.5	1.8	293.7	1.275
13	3.	286.	5.6	.003	-13.2	-14.5	1.9	294.0	.970
20	9				-13.8	-14.5	1.9	294.1	1.854
43	-	305.	5.3	010	-15.3	-15.7	1.8	295.0	3.626
99	8				-16.7		1.1	295.9	0
74	2	319.	5.0	010	-17.3		1.6	296.0	2.056
4	8.	307.	6.4	003	-19.7	-20.7	1.3		2.043
21	5				-21.0	-22.3	1.1		
35	2.	288.	6.5	.053	-22-1	-24.3	1.0	297.2	
42	6				-22.1	-25.4	6.		2.307
5	2.	297.	8.3	.059	-24.6	-26.8	۰.		
95	-				-27.1	-28.7		298.3	
5	0	293.		003	-27.1	-28.8			-
11	0	289.	8.0	013	-28.4	-31.7	.5	298.5	1.312

.

CATE		
17/03/77	13:30:	00 DPGWV
HGT.	IND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	319.0	8.3
146.	322.0	5.8
204.	323.0	5.3
259.	319.0	8.7
314.	319.0	9.2
369.	319.0	9.6
424.	320.0	9.3
479.	323.0	8.5
533.	322.0	8.0
588.	321.0	. 9.1
643.	319.0	10.8
698.	321.0	11.8
753.	325.0	10.2
808.	325.0	9.4
863.	326.0	9.0
918.	326.0	8.0
972.	325.0	7.5
1027.	321.0	8.5
1082.	317.0	8.2
1137.	310.0	8.8
1192.	305.0	8.2
1247.	305.0	9.9
1302.	302.0	10.5
1356.	299.0	10.9
1411.	296.0	10.0
1466.	291.0	10.5
1521.	289.0	10.6

	01HV/02 (*1300)	00'	19.29	7.18	8.82	.42	1.59	1.52	1.85	.23	.22	23	.93	2.14	1.93	4.81	3.51	28.62	5.88	06.9	5.21	4.62	6.43	5.34	3.02	3.36	5.9	.92
	THV*	81.	82.	82.	83.	83.	84.	84.	84.	84.	84.	84.	84.	85.	85.	86.	86.	88.	289.2	89.	.06	91.	95.	93.	.46	95.	5	296.4
<b>&gt; X X</b>	MR (GM/KG)	2.2		1.7			1.3	1.2	1.1	1.1	1.1	1.1	1.1	1.0	1.0	9.	.5	.3	.2	-:	.1	.1	••	1.	.1	1.	.1	7:
TION DPGWV	DEWPT (DEG C)	1 .	-	-12.8		-14.2	-16.2				6	0	0	-	-22.1	7	8	34.		~		7.		-47.8	-48.5	8.64-	-51.2	-
: 00:00 LOCATION	TEMP (DEG C)	3 :		-3.5				-9.2	•	•	-14.9	-16.2	-16.7	-17.6	-18.5	-19.5		18.	-19.7	6.61-	21.	-	2.	3.	+	.0	-28.9	-30.1
TIME 05:0	00/05 (*10)	000		.545		610	.026	.026		5	.033	0		023		030			.030		.122		.089		0	8	.013	0
	U (M/S)	3.6		12.0		10.8		12.4		14.0	15.0	15.1		14.7		13.8			14.7		18.4		21.1		2	5.	26.0	.9
DATE 18/03/77	WIND DIR	310.		316.			317.				308	307.		307.		311.			319.		326.		329.		3	3	338.	3
	PRESS (MB)																										511.6	
RADIOSONDE	7	0.	40.	5	4	0	0	-	6	-	52	65	11	82	56	13	19	25	43	64	14	81	04	20	35	65	3959.	12

CATE		PLACE
18/03/	77 15:00:00	DPGWV
HGT.	WIND DIR W	IND SPEED
(M)	(DEG)	(M/S)
· · · · · · · · · · · · · · · · · · ·		14737
76.	5.0	2.2
146.	336.0	2.6
204.	325.0	3.5
259.	325.0	3.4
314.	334.0	2.0
369.	332.0	3.0
424.	320.0	3.1
479.	321.0	3.1
533.	305.0	3.8
588.	300.0	4.5
643.	318.0	4.8
698.	307.0	5.5
753.	298.0	6.0
808.	298.0	5.5
863.	295.0	5.2
918.	287.0	5.2
972.	281.0	5.5
1027.	281.0	5.5
1082.	276.0	5.6
1137.	274.0	6.2
1192.	275.0	7.0
1247.	280.0	7.3
1302.	281.0	8.5
1356.	281.0	9.5
1411.	284.0	9.5
1466.	286.0	9.5
1521.	285.0	11.0
1576.	286.0	11.2
1631.	288.0	10.6

PADIDSGNDE DATE 21/03/77 TIME 05:00:00 LOCATION DPGWV

( N )	PRESS (MB)	WIND DIR	(S/M)	(01*)	TEMP (DEG C)	DEWPT (DFG C)	MR (GM/KG)	THV* (DEG K)	0THV/9Z (*1030)
0.0	73.	180.	2.6	000	-2.7	13.		1:	000
67.	865.8		•		1.	-10.0	2.1	285.7	4.3
-	54.				2.5				28.865
-	50.	198.	æ.	083	7.7	6		.6	4.31
-	43.					-10.2		0	1.7
0	40.	113.	1.3	950.	2.6	0		0	
0	.60	347.	1.6	010.	.3			0	~
	88.				-1.3			-1	.02
-	79.	329.	5.7	.134	-2.2	-12.8		-	.813
-	.64	328.	9.6	.128	•	•		1:	.703
52	20.	328.	12.6	660.	-7.7	-12.8		-	416.
68	05.	100.	6.66					2.	.727
15	.00	328.	-3-	13.375		N		3	-
82	93.	329.	14.6	040.		-12.8		2.	.52
10	76.				-	2		2.	0.
13	.09	335.	14.9	010.	0	4		5	9.
25	99				8	-		8	3
3	40.	343.	15.7	.026	. 6	-18.1		0	1.968
58	23.				6	18.	1.4	-	.6
74	15.	346.	•	.039	0	19.	1.3	-	.2
40	.16	344.	17.8	.030		-		2.	
35	.80	340.	18.2	.013	+	23.		3.	.2
39	65.					23.	1.0	4	.34
65	+0.	335.	18.5	.010	-16.6	5	6.	5.	9.
65	24.	329.		.013	-18.4		8.	. 9	.52
50	521.8				-18.6	27.	8.	306.8	0
26	C	327.	20.0	.036	1.61-	-28.9	.7	308.8	51
31	0.009			10	-	29.	.1	309.0	3.922

DA:		ME PLACE 1:00 DPGWV
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76. 146. 204.	140.0 137.0 117.0	.8 1.0 1.1
259. 314. 369. 424.	121.0 292.0 291.0 329.0	.4 .6 .5
479. 533. 588. 643.	340.0 319.0 294.0 301.0	1.7 1.4 1.7
698. 753. 808.	308.0 311.0 314.0	2.1 2.8 3.2 3.2
863. 918. 972. 1027.	314.0 319.0 321.0 320.0	3.1 4.0 4.8 7.0
1082. 1137. 1192.	322.0 323.0 322.0	6.0 5.1 5.7
1247. 1302. 1356. 1411.	325.0 326.0 321.0 322.0	6.8 7.0 7.0 7.3
1466. 1521. 1576. 1631.	322.0 323.0 325.0 325.0	8.0 7.8 6.9
1686. 1741. 1796.	324.0 323.0 324.0	6.8 7.0 7.4 8.1
1851. 1905. 1960. 2015.	328.0 328.0 326.0 326.0	8.0 8.0 8.1 8.0

RADIOSCNDE DATE 22/03/77 TIME 05:00:00 LOCATION DPGWV

7	ES	WIND DIR	n	20/00		DEWPT	MR	THV*	-
(M)	(MB)	(DEG)	(M/S)	(*10)	(DEG C)	(DEG C)	(GM/KG)	(DEG K)	(*1000)
0	71.	135.	4.1	000.				82.	000
44.	866.8				2.1	-6.1	2.8	287.9	.6
	61.				•			91.	19.
3	56.					-8.4		. 46	8.85
	50.	190.	5.8	.083				. 46	.97
6	40.				•	-9.5		95.	.8
0	39.	173.	•	020	7.8	9.6-		95.	1.
0	.60	184.	5.3	010		-11.1		97.	3.980
-	08.				6.0	-11.1		97.	.5
-	19.	193.	4.4	030	•	-12.0		97.	.6
-	50.	217.	3.3	036	1.6	-12.9		98.	
4	48.				1.4	-13.0	6.1	98.	7
2	22.	253.	2.8	016	8	-13.7	1.8	.66	0
4	20.				6	-13.7	1.8	.66	.5
-	.00	276.	3.3	.020	-3.0	9.91-	1.5	.66	.537
2	.55	281.	3.6	• 059	-3.4	-17.2	1.4	0	6.
-	82.				1-4-	-19.1	1.2	.66	0
3	.69	295.	5.3	.056	-5.4	2.	6.	0	5.452
3	43.	298.	9.9	.043	6.9-		• 5	02.	.2
3	18.	299.	8.0	.046		5	.3	03.	
4	18.				-8.4	-37.7	.2	03.	-
4	95.	300.	1001	690.		8	9.	04.	.3
-	92.				-10.7	7	.7	04.	9.
0	75.				-	0	• 5	.90	
5	71.	300.	11.3	.039	-12.1	-30.4	• •	.90	
5	.64	295.	11.9	.020	-14.6	0	••	07.	8
-	33.				9	-29.9	9.	307.4	
3	27.	295.		910.	-	0	9.	07.	.5
9	.90	300.	12.7	010.	-19.3	-33.7	*.	08.	.6
9	.00	299.		.021	0	7.45-	4	308.6	4

1

DATE 22/03/1	Control of the second second second	PLACE O DPGWV
HGT.		WIND SPEED
(M)	(DEG)	(M/S)
76.	132.0	2.1
146.	141.0	4.3
204.	145.0	6.7
259.	144.0	7.4
314.	141.0	8.2
369.	139.0	7.6
424.	138.0	6.6
479.	144.0	8.0
533.	149.0	8.8
588.	151.0	5.8
643.	155.0	4.9
698.	152.0	5.2
753.	141.0	6.1
808.	135.0	7.8
863.	135.0	9.2
918.	141.0	11.2
972.	141.0	10.0
1027.	157.0	3.5
1082.	334.0	.2
1137.	33.0	.8
1192.	309.0	.5
1247.	160.0	2.0
1302.	156.0	4.3
1356.	150.0	5.0

7	PRESS	WIND DIR	כ	20/00	TEMP	DEWPT	M.	*AH1	DTHV/DZ
(M)	(MB)	u	(M/S)	(+10)	(DEG C)	(DEG C)	(GM/KG)	(DEG K)	(*1000)
0		150.	5.7	000.	-1:1	-11.8	1.8	284.1	000
.09					6.1	-7.5	2.5	293.0	148.380
118.	850.0	170.	8.0	561.	8.6	-8.4		295.6	44.062
167.					10.1	-9.0		297.7	42.000
305.		159.	8.2	110.	10.1	9.6-	2.2	299.1	10.165
+14.					10.2	-10.0		300.3	11.186
603.					4.6	-11.0		301.4	5.767
.609		175.	7.4	026	4.6	-11.0	2.1	301.4	10.832
914.		192.	8.0	.020	7.6	-12.6	6.1	302.7	4.077
.612	743.9	203.	9.2	.039	5.8	-14.2	1.7	303.9	4.047
347.	732.4				5.0	-14.9	1.6	304.4	3.661
523.	716.4	205.		.026	3.4	-15.4	9.7	304.5	916.
.601	700.0	203.		110.	1.8	-15.8	1.6	304.8	1.329
828.	1.689	201.		800.	.7	-16.1	1.6	304.9	.566
132.	663.9	195.	10.5	100.	-2.0	-16.9	1.5	305.1	.971
437.	639.1	195.	10.8	010.	-4.8	-17.6	1.5	305.3	.489
541.	630.3				-5.7	-17.9	1.5	305.4	1.081
741.	1.419	198.	10.7	003	-7.5	-19.1	1.4	305.6	.878
.940	591.0	201.	10.2	016	-10.2	-21.0	1.2	305.9	.933
268.	574.3				-12.2		1.1	306.0	.684
350.	568.1	203.	9.6	020	-12.9		1.0	306.1	1.333
655.	545.8	205.	9.6	003	-15.5			306.5	1.233
194.	535.8				-16.7		9.	306.7	1.223
.656	524.1	211.	10.3	.026	-18.1	-31.6	.5	306.9	1.481
263.	503.1	214.	11.4	.036	-20.5	-34.5	4.	307.6	2.197
309.	500.0	215.	5	020	0 00		,	207 4	1 164

DAT	E TIM	E PLACE
23/03	/77 15:11	:00 DPGWV
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	196.0	9.5
146.	200.0	4.8
204.	198.0	7.0
259.	198.0	12.0
314.	199.0	14.0
369.	199.0	16.2
424.	200.0	18.5
479.	200.0	20.0
533.	200.0	20.0
588.	200.0	19.8
643.	201.0	17.0
698.	201.0	14.0
753.	202.0	11.9
808.	203.0	14.0
863.	202.0	18.9
918.	201.0	16.8
972.	209.0	11.0
1027.	223.0	8.0

Note: Radiosonde data for the morning of 24/03/77 was not obtained.

DATE	TIME	PLACE
24/03/7	7 15:11:0	O DPGWV
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	2.0	5.2
146.	355.0	5.0
204.	353.0	3.9
259.	354.0	3.6
314.	354.0	3.5
369.	355.0	2.5
424.	358.0	2.3
479.	10.0	3.5
533.	21.0	3.9
588.	22.0	3.9
643.	20.0	4.2
698.	22.0	4.0
753.	22.0	3.6

4.796 4.026 3.037 4.375 .622 3.961 -.798 1.416 4.204 5.051 3.051 .308 5.397 -1.850 9.809 3.002 2.716 160.4 10.867 DTHV/DZ (0001\*) 4.611 (DEG K) 293.0 293.5 296.0 287.3 288.5 289.0 287.6 288.4 290.3 295.1 299.5 299.5 28882 294.3 297.0 298.3 301.1 301.1 301.6 (GM/KG) 2.6 1.9 1.6 1.00 DATE 25/03/77 TIME 06:00:00 LOCATION DPGWV (DEG C) -5.8 -6.7 -9.6 -15.2 -6.3 -8.8 -9.5 -21.2 -8.4 -11.3 DEWPT -13.2 -17.2 -19.2 -24.6 -21.3 -24.5 -26.6 (DEG C) -14.5 TEMP -1:0 -21.8 . -3.8 -5.5 -6.2 -7.9 -8.2 -8.4 -12.4 -20.5 -20.3 -16.6 -24.5 : -10.2 -18.4 -21.9 -.033 -.072 .009 .000 -.024 .039 .013 -.006 .023 .020 20/00 (\*10) -.049 -.029 -.010 164. -.023 -.076 11.2 13.6 4.1 13.9 12.1 11.9 5.2 12.7 14.3 4.2 IN/SI MIND DIR 1930) 359. 335. 338. 344. 352. 358. 351. 314. 282. 222. 850.0 833.8 823.9 174.3 762.8 728.3 577.5 524.5 537.8 (MB) 733.7 700.0 9.159 626.2 61119 192.9 746.3 701.3 F ADIOSCNOE 678.0 601.5 555.3 914. 1276. 3 210. 1219. 1583. 1828. 2132. 2615. 3046. 3350. 609 797. 1569. 2741. 3339. 3645. 3655. 2437.

B-54

25/03/7	TIME 77 14:56:0	O DPGWV
 HGT.		WIND SPEED
(M)	(DEG)	(M/S)
76.	313.0	•5
146.	324.0	.4
204.	13.0	.4
259.	345.0	.8
314.	25.0	•1
369.	69.0	•6
424.	45.0	•7
479. 533.	23.0 17.0	.6
588.	10.0	1.3
643.	17.0	1.9
698.	9.0	1.4
753.	8.0	2.4
808.	4.0	3.7
863.	360.0	3.8
918.	360.0	4.0
972.	359.0	4.1
1027.	355.0	3.5
1082.	354.0	3.2
1137.	354.0	3.8
1192.	2.0	3.9
1247.	3.0	4.2
1302.	2.0	4.8
1356.	2.0	5.0
1411.	1.0	5.2
1466.	357.0	5.3
1521.	354.0	5.2
1576.	348.0	4.8
1631.	348.0	3.9
1686.	343.0	3.5
1741.	330.0	3.5
1796.	317.0	3.3 3.5
1851.	313.0 307.0	3.6
1905.	289.0	3.0
2015.	277.0	3.0

RADIOSCNDE DATE 28/03/77 TIME 05:00:00 LOCATION DPGWV

Z         PRESS         WIND DIR         U DU/DZ         TEMP         DEMPT         MR         THV*         DTHV/DZ           (M)         (MB)         (DEG)         (M/S)         (**10)         (DEG C)         (GM/KG)         (DEG K)         (#1000)           9         861.8         270.         1.5         .000         -3.5         -12.9         1.6         281.6         .000           102.         861.8         270.         1.5         .000         -3.6         -13.3         1.6         283.5         1.7118           118.         850.0         302.         13.3         1.000         -2.6         -13.3         1.6         283.5         1.2.189           319.         882.3         31.         .026         -7.2         -14.4         1.5         283.5         1.2.189           914.         767.5         322.         11.8         -0.02         -4.2         -14.4         1.5         283.5         1.2.189           914.         167.5         320.         12.8         -010         -12.6         114.4         1.5         284.6         -4.2           157.         709.0         32.8         13.4         1.6         283.5         1.	F AU IU SUNUE									
0.         862.8         270.         1.5         .000         -3.5         -12.9         1.6         283.5         16.71.           9.         861.8         302.         13.3         1.000         -2.6         -13.4         1.6         283.5         14.7           18.         850.0         302.         13.3         1.000         -4.2         -14.4         1.6         283.5         -2.4           19.         830.2         309.         11.8         -080         -4.2         -14.4         1.5         283.9         2.2           19.         788.2         314.         12.6         -026         -7.0         -15.5         11.4         284.0         11.0           19.         737.9         330.         12.8         .010         -12.6         -18.7         1.4         284.1         -4           19.         703.0         336.         14.1         .042         -16.6         11.2         284.9         -1           19.         703.0         338.         14.1         .042         -16.6         11.2         284.9         -1           20.         13.1         14.9         .036         -18.0         11.2         284.9	7 (%)	RES	WIND DIR	(M/S)	( *10) Z0/00	TEM	Δ.	MR (GM/KG)	THV* (DEG K)	DTHV/DZ (*1000)
9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 861.8  9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9. 9	0		270.	1.5	000		2.	1.6		000
02.         651.8         -2.6         -13.3         1.6         283.5         14.71           18.         650.0         302.         13.3         1.000         -2.8         -13.4         1.6         283.5         -2.48           13.         829.3         309.         11.8        080         -4.2         -14.4         1.5         284.0         1.04           13.         198.2         314.         12.6         .026         -7.0         -15.5         1.4         284.1         -4.0           14.         767.5         322.         12.5        003         -9.8         -16.6         1.4         284.1         -4.0           14.         767.5         332.         12.8         .010         -12.6         -18.0         1.3         284.1         -4.0           19.         703.0         336.         13.7         .030         -15.4         -18.0         1.2         284.3         -55           19.         700.0         338.         14.1         .042         -16.2         -18.0         1.2         284.4         -10.0           23.         709.0         341.         14.9         .038         -18.2         -18.0         1.2 </td <td>6</td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td>1.6</td> <td></td> <td>7.1</td>	6					•		1.6		7.1
18. 650.0         302.         13.3         1.000         -2.8         -13.4         1.6         283.5         -2.46           19. 650.0         300.2         309.         11.8        080         -4.2         -14.4         1.5         283.9         2.26           19. 6.2         314.         12.6         .026         -7.0         -15.5         1.4         284.1         1.00           14. 767.5         322.         12.6         .026         -7.0         -15.5         1.4         284.1         1.00           14. 767.5         330.         12.8         .010         -12.6         -17.8         1.3         284.4         .47           19. 703.0         336.         13.7         .030         -15.9         -18.0         1.2         284.6         .47           19. 700.0         341.         14.9         .038         -18.0         1.2         284.6         .47           19. 666.3         342.         14.9         .038         -18.0         1.2         284.6         .41           19. 666.3         342.         14.9         .038         -18.0         1.2         284.6         .42           19. 666.3         342.         15.2	0					•	-13.3	1.6		14.711
05.         830.2         309.         11.8        080         -4.2         -14.4         1.5         284.0         11.04           13.         829.3         314.         12.6         .026         -7.2         -14.4         1.5         284.0         11.04           19.         737.9         322.         12.5        003         -9.8         -16.6         1.4         284.1         .45           14.         532.         12.5        003         -12.6         -17.8         1.3         284.5         .45           14.         737.9         336.         12.8         .010         -12.6         -18.0         1.3         284.5         1.06           23.         709.0         336.         13.7         .030         -15.4         -18.0         1.2         284.6         -10.6           24.         666.3         341.         14.9         .038         -18.0         1.2         284.7         -85           28.         666.3         342.         14.9         .038         -18.0         1.2         284.8         1.06           28.         666.3         342.         15.5         .020         -20.1         -23.8         8	-		302.	13.3	1.000	2.	-13.4	1.6		2
13.         829.3           14.         829.3           14.         12.6         -026         -7.0         -15.5         1.4         284.0         -10.0           14.         787.2         322.         12.5         -003         -7.0         -15.5         1.4         284.1         -40           19.         737.3         330.         12.8         .010         -12.6         -17.8         1.3         284.4         -47           23.         709.0         336.         13.7         .030         -15.4         -18.0         1.2         284.6         -41           23.         709.0         341.         14.1         .042         -15.9         -18.7         1.2         284.6         -41           28.         700.0         341.         14.9         .038         -18.0         -19.6         1.2         284.7         -82           28.         666.3         341.         14.9         .038         -18.0         -19.6         11.2         284.8         2.65.5           28.         666.3         341.         14.9         .038         -18.0         -19.6         11.2         284.8         -18.5           29.	0		309.	11.8	080	+	-14.4	1.5		2.266
09. 798.2         314.         12.6         .026         -7.0         -15.5         1.4         284.1         .40           14. 767.5         322.         12.5        003         -9.8         -16.6         1.4         284.3         .55           19. 737.9         330.         12.8         .010         -12.6         -17.8         1.3         284.4         .47           23. 731.3         336.         13.7         .030         -15.4         -18.6         1.2         284.5         1.06           23. 709.0         336.         13.7         .030         -15.4         -18.6         1.2         284.6         -41           19. 700.0         341.         14.1         .042         -16.2         -18.7         1.2         284.6         -41           19. 666.3         341.         14.9         .038         -18.0         -19.6         1.2         284.6         -55.5           19. 666.3         342.         15.5         .020         -20.1         -23.8         8         286.2         -55.5           10. 666.3         342.         15.5         .020         -20.1         -23.8         -287.0         -88.7         -10.8           11. 601.5	-						-	1.5	284.0	11.046
14. 767.5         322. 12.5003         -9.8 -16.6         1.4 284.3         .55           19. 737.9         330. 12.8 .010 -12.6 -17.8 1.3 284.4 .47         .47           23. 709.0         336. 13.7 .030 -15.4 -18.6 1.2 284.5 1.06         .4           23. 709.0         336. 13.7 .030 -15.4 -18.6 1.2 284.8 1.2 284.8 1.2 284.8 1.2 284.8 1.2 284.8 1.2 284.8 1.2 285.1 1.2 284.8 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2 285.1 1.2	O		314.	12.6	.026		-	1.4	284.1	.402
19.       737.9       330.       12.8       .010       -12.6       -17.8       1.3       284.5       1.06         23.       709.0       336.       13.7       .030       -15.4       -18.6       1.2       284.5       1.06         79.       703.8       14.1       .042       -16.2       -18.6       1.2       284.7       .82         19.       600.0       341.       14.9       .038       -18.0       -19.6       1.2       285.1       2.65         28.       666.3       341.       14.9       .038       -18.0       -19.6       1.2       285.1       1.68         28.       666.3       342.       15.5       .020       -20.1       -23.8       .8       285.2       .53         31.       649.3       342.       15.5       .020       -20.1       -23.8       .8       285.2       .53         31.       649.3       342.       15.5       -0.00       -20.3       -25.0       .8       285.9       .51         40.       621.8       336.       15.3       .003       -24.6       -33.8       .4       287.3       -63         40.       57.8       338.	-		322.	12.5	003		-16.6	1.4	284.3	.556
28.         731.3         -13.2         -18.0         1.3         284.5         1.00           23.         709.0         336.         13.7         .030         -15.4         -18.6         1.2         284.6         .41           79.         703.8         341.         14.1         .042         -16.2         -18.7         1.2         284.7         .82           19.         700.0         341.         14.9         .038         -18.0         11.2         284.8         2.65           28.         680.0         341.         14.9         .038         -18.0         11.2         284.8         2.65           39.         666.3         342.         15.5         .020         -20.1         -23.8         .8         285.2         5.19           81.         649.3         342.         15.2         -010         -22.1         -29.4         .5         287.9         5.19           81.         649.3         336.         15.2         -010         -22.5         -30.4         .5         287.9         5.11           46.         576.8         337.         99.9         2.774         -27.7         -38.7         2         287.9         11.45	-		330.	12.8	010.	-	-17.8	1.3	284.4	.475
23.         709.0         336.         13.7         .030         -15.4         -18.6         1.2         284.7         .82           19.         700.0         338.         14.1         .042         -16.2         -18.9         1.2         284.8         2.65           28.         680.0         341.         14.9         .038         -18.0         -19.6         1.2         285.1         1.68           28.         666.3         341.         14.9         .038         -18.0         -19.6         1.2         285.2         2.85           39.         666.3         342.         15.5         .020         -20.1         -23.8         .8         285.2         -53           31.         649.3         342.         15.2         -010         -22.1         -29.4         .5         287.9         5.16           31.         621.8         339.         15.2         -010         -22.5         -30.4         .5         287.2         3.97           46.         576.8         337.         99.9         2.774         -27.7         -38.7         .2         287.3         -6.0           56.         572.8         338.         16.3         2.774	a					-13.2	-18.0	1.3	284.5	1.064
79. 703.8         338. 14.1         .042 -16.2 -18.9 1.2 284.8 2.65           19. 700.0         341. 14.9 .038 -18.0 -19.6 1.2 285.1 1.68           28. 680.0         341. 14.9 .038 -18.0 -19.6 1.2 285.2 .53           28. 660.3         -19.4 -20.1 1.2 285.2 .53           32. 653.5         342. 15.5 .020 -20.1 -23.8 .8 285.2 .53           31. 649.3         -15.2 .020 -20.1 -23.8 .8 286.2 .85           31. 649.3         -20.1 -22.1 -29.4 .5 287.0 .29           31. 627.1 339. 15.2010 -22.1 -29.4 .5 287.0 .287.2 .4           44. 601.5 338. 15.3 .003 -24.6 -33.8 .4 .5 287.2 .1.19           46. 576.8 337. 99.9 2.774 -27.7 -38.7 .2 287.360           50. 552.8 338. 16.3 -2.750 -30.1 -38.7 .2 288.0 .3           22. 547.320.7 -38.3 .3 288.1 1.55           23. 55. 529.4 339. 17.5 .026 -35.4 -44.0 .1 288.8 1.04           55. 500.0 339. 17.5 .000 -36.2 -45.0 .1 288.9 1.04	2		336.	13.7	.030	-15.4	-18.6	1.2	284.6	.415
19. 700.0       338.       14.1       .042       -16.2       -18.9       1.2       284.8       2.65         28. 680.0       341.       14.9       .038       -18.0       -19.6       1.2       285.1       1.68         89. 666.3       -19.4       -20.1       1.2       285.2       .53         32. 663.5       342.       15.5       .020       -20.1       -23.8       .8       285.2       .53         32. 653.5       342.       15.5       .020       -20.1       -23.8       .8       285.9       5.19         31. 649.3       37. 627.1       339.       15.2       -010       -22.1       -29.4       .5       287.2       5.85         31. 601.5       338.       15.3       .003       -24.6       -33.8       .4       287.5       1.19         46. 576.8       337.       99.9       2.774       -27.7       -38.7       .2       287.3      60         50. 552.8       338.       16.3       -2.75       -30.7       -38.3       .3       288.0       .3         22. 547.3       -2.75       -30.7       -38.3       .3       288.1       1.56         55. 52.4       339.	-					-15.9	-18.7	1.2		.827
28.       680.0       341.       14.9       .038       -18.0       -19.6       1.2       285.2       .53         89.       666.3       342.       15.5       .020       -20.1       1.2       285.2       .53         32.       653.5       342.       15.5       .020       -20.1       -23.8       .8       286.2       5.19         81.       649.3       342.       15.2       -010       -22.1       -29.4       .5       287.0       5.85         37.       627.1       339.       15.2       -010       -22.1       -29.4       .5       287.0       2.97         41.       601.5       338.       15.3       .003       -24.6       -33.8       .4       287.5       1.19         46.       576.8       337.       99.9       2.774       -27.7       -38.7       .2       287.3       -60         50.       552.8       338.       16.3       -2.750       -30.1       -38.4       .2       288.0       .39         55.       552.8       339.       16.7       .013       -32.7       -40.8       .2       288.1       1.04         55.       500.0       339.	-		338.	14.1	.042	-16.2	-18.9	1.2		2.653
89.       666.3         32.       653.5         32.       653.5         32.       653.5         32.       653.5         32.       653.5         32.       653.5         33.       15.2         37.       627.1         33.       15.2         40.       621.8         33.       15.2         41.       601.5         338.       15.3         42.       576.8         337.       99.9         27.77       -38.7         27.       -38.7         27.       -38.7         27.       -38.7         27.       -38.7         27.       -38.7         27.       -38.7         27.       -38.7         27.       -38.7         27.       -38.7         28.       11.45         29.       -40.8         27.       -38.4         28.       1.48         29.       -40.8         29.       -40.8         29.       -27.7         28.       -40.8         28.	2		341.	14.9	.038	18	-19.6	1.2		1.688
32.       653.5       342.       15.5       .020       -20.1       -23.8       .8       286.2       5.85         81.       649.3       .649.3       .20.3       -25.0       .8       286.2       5.85         37.       627.1       339.       15.2      010       -22.1       -29.4       .5       287.2       5.87.2         50.       621.8       338.       15.3       .003       -24.6       -33.8       .4       287.2       3.67         46.       576.8       337.       99.9       2.774       -27.7       -38.7       .2       287.3      60         56.       572.8       338.       16.3       -2.750       -30.1       -38.4       .2       288.0       .39         22.       547.3       .6       -30.1       -38.4       .2       288.0       .39         55.       529.4       339.       16.7       .013       -32.7       -40.8       .2       288.8       1.04         55.       500.0       339.       17.5       .000       -36.2       -44.0       .1       288.9       1.04         55.       500.0       339.       17.5       .000       -36.2	8					-19.4	-20.1	1.2		.536
81.       649.3       -20.3       -25.0       .8       286.2       5.85         37.       627.1       339.       15.2      010       -22.1       -29.4       .5       287.0       2.97         41.       621.8       338.       15.3       .003       -24.6       -33.8       .4       287.5       13.9         46.       576.8       338.       15.3       .003       -24.6       -33.8       .4       287.5       11.19         56.       572.8       337.       99.9       2.774       -27.7       -38.7       .2       287.3      60         50.       552.8       338.       16.3       -2.750       -30.1       -38.4       .2       288.0       .39         22.       547.3       -3       -30.1       -38.4       .2       288.1       1.56         55.       529.4       339.       16.7       .013       -32.7       -40.8       .2       288.5       1.48         55.       500.0       339.       17.5       .000       -36.2       -44.0       .1       288.9       1.04         55.       500.0       339.       17.5       .000       -36.2       -45.0	3		342.	15.5	.020	-20.1	-23.8	8.		5.190
37.     627.1     339.     15.2    010     -22.5     -30.4     .5     287.2     3.67       41.     601.5     338.     15.3     .003     -24.6     -33.8     .4     287.5     1.19       46.     576.8     337.     99.9     2.774     -27.7     -38.7     .2     287.3    60       96.     572.8     338.     16.3     -2.750     -30.1     -38.7     .2     288.0     .39       20.     552.8     338.     16.3     -2.750     -30.1     -38.4     .2     288.0     .39       22.     547.3     -30.1     -38.3     .3     288.1     1.56       55.     529.4     339.     16.7     .013     -32.7     -40.8     .2     288.8     1.04       55.     500.0     339.     17.5     .000     -36.2     -44.0     .1     288.9     1.04       55.     500.0     339.     17.5     .000     -36.2     -45.0     .1     288.9     1.04       55.     500.0     339.     17.5     .000     -36.2     -45.0     .1     288.9     1.04	8					-20.3	-25.0	8.	286.2	5.857
00.       621.8       338.       15.3       .003       -24.6       -33.8       .4       287.5       1.19         41.       601.5       337.       99.9       2.774       -27.7       -38.7       .2       287.3       -60         96.       572.8       337.       99.9       2.774       -27.7       -38.7       .2       287.3       -60         50.       552.8       338.       16.3       -2.750       -30.1       -38.4       .2       288.0       .39         22.       547.3       -30.7       -38.3       .3       288.1       1.56         55.       529.4       339.       16.7       .013       -32.7       -40.8       .2       288.5       1.48         59.       506.9       339.       17.5       .000       -36.2       -44.0       .1       288.8       1.04         55.       500.0       339.       17.5       .000       -36.2       -45.0       .1       288.9       1.62	3		339.	15.2	010	-22.1	-29.4	• 5	287.0	2.978
41.     601.5     338.     15.3     .003     -24.6     -33.8     .4     287.5     1.19       46.     576.8     337.     99.9     2.774     -27.7     -38.7     .2     287.3    60       96.     572.8     338.     16.3     -2.75     -38.7     .2     287.9     11.45       50.     552.8     338.     16.3     -2.75     -30.1     -38.4     .2     288.0     .39       55.     529.4     339.     16.7     .013     -32.7     -40.8     .2     288.5     1.48       59.     506.9     339.     17.5     .000     -36.2     -44.0     .1     288.8     1.04       55.     500.0     339.     17.5     .000     -36.2     -45.0     .1     288.9     1.04	0					-22.5	-30.4	• •		3.674
46.     576.8     337.     99.9     2.774     -27.7     -38.7     .2     287.9     11.45       96.     572.8     338.     16.3     -2.750     -30.1     -38.4     .2     288.0     .39       22.     547.3     16.7     .013     -30.7     -38.3     .3     288.1     1.56       55.     529.4     339.     16.7     .013     -32.7     -40.8     .2     288.5     1.48       59.     506.9     339.     17.5     .000     -36.2     -44.0     .1     288.8     1.04       55.     500.0     339.     17.5     .000     -36.2     -45.0     .1     288.9     1.62	3		338.	15.3	.003	-24.6	-33.8	*.		1.197
96.     572.8       50.     552.8       338.     16.3 -2.750       -30.1     -38.4       -30.2     -38.4       -30.1     -38.4       -30.2     -38.3       -30.1     -38.3       -30.2     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -38.3       -30.1     -44.0       -30.1     -44.0       -30.1     -44.0       -30.1     -44.0       -30.1     -44.0       -30.1     -44.0       -44.0     -1       -44.0     -1       -44.0     -1       -44.0     -1       -44.0     -1       -44.0     -1       -44.0     -1       -44.0     -1       -46.0     -1       -46.0     -1	4		337.	6.66		-27.7	-38.7	.2		631
50.       552.8       338.       16.3 -2.750       -30.1       -38.4       .2       288.0       .3         22.       547.3       -30.7       -30.7       -38.3       .3       288.1       1.56         55.       529.4       339.       16.7       .013       -32.7       -40.8       .2       288.5       1.48         59.       506.9       339.       17.5       .000       -36.2       -44.0       .1       288.8       1.04         55.       500.0       339.       17.5       .000       -36.2       -45.0       .1       288.9       1.62	9					-27.7	-38.7	.2	-	11.454
22.       547.3       -30.7       -38.3       .3       288.1       1.56         55.       529.4       339.       16.7       .013       -32.7       -40.8       .2       288.5       1.48         59.       506.9       339.       17.5       .026       -35.4       -44.0       .1       288.8       1.04         55.       500.0       339.       17.5       .000       -36.2       -45.0       .1       288.9       1.62	5		338.	16.3	•	-30.1	-38.4	.2	288.0	.395
55. 529.4     339.     16.7     .013     -32.7     -40.8     .2     288.5     1.48       59. 506.9     339.     17.5     .026     -35.4     -44.0     .1     288.8     1.04       55. 500.0     339.     17.5     .000     -36.2     -45.0     .1     288.9     1.62	2					-30.7	-38.3	•3	288.1	56
59. 506.9 339. 17.5 .026 -35.4 -44.0 .1 288.8 1 55. 500.0 339. 17.5 .000 -36.2 -45.0 .1 288.9 1	5		339.	16.7	.013	-32.7		• 5	288.5	.48
55. 500.0 339. 17.5 .000 -36.2 -45.0 .1 288.9 1.6	5		339.		.026	-35.4	-44.0	1.	288.8	1.042
	5		339.	17.5	0000	-36.2	-45.0	7.	288.9	1.628

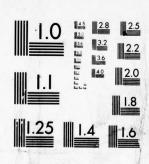
DATE 28/03/	77 15:07	
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76.	309.0	6.8
146.	306.0	9.2
204.	293.0	8.8
259.	293.0	8.5
314. 369.	299.0	6.9
424.	296.0 295.0	4.8
479.	297.0	2.8
533.	304.0	5.0
588.	306.0	8.0
643.	306.0	9.0
698.	308.0	9.5
753.	309.0	9.0
808.	314.0	8.5
863.	316.0	9.0
918. 972.	317.0	8.9
1027.	321.0 320.0	7.5 7.5
1082.	317.0	7.9
1137.	317.0	6.0
1192.	318.0	5.0
1247.	319.0	6.0
1302.	323.0	7.5
1356.	323.0	6.9
1411.	323.0	5.8
1466.	324.0	5.0
1521. 1576.	325.0 322.0	4.8 5.3
1631.	318.0	8.0
1686.	317.0	8.0
1741.	315.0	7.5
1796.	315.0	7.0
1851.	315.0	7.5
1905.	315.0	7.7
1960.	313.0	7.8
2015.	313.0	7.0

RADIOSONDE DATE 29/03/77 TIME 05:00:00 LOCATION DPGWV

	0	AIO ONIN	<b>-</b>	20/00	TEMP	DEWPT	MR	THV*	DTHV/DZ
3	(48)	(DEG)	(M/S)	(*10)	(DEG C)	(DEG C)	(GM/KG)	(DEG K)	(*1000)
0	0	280.	2.6	000.	-3.0	-11.0	1.9		000
.86	0				•	-12.4	1.1	283.0	6.693
0	0	296.	11.0	.832	4.6-	-12.4	1.7		-25.398
0	.6				•	-12.2	1.8		9.282
0	8	304.	9.1	093	-4.5	-12.7	1.7	283.8	019.
0	.9	311.	8.9	007	-7.3	-13.9	9.1		.550
-	5.				-9.2	-14.8	1.6	284.1	.478
~	. 9	317.	7.7	039		-15.1	1.5	284.2	909.
21	.9	320.	6.5	039		-16.2	1.5	284.5	066.
51	-						1.4	284.7	.676
52	7.	319.	5.9	020	-15.5	-17.3	1.4	284.7	11.134
09	0	319.	0.9	.013			1.3	284.8	.788
82	8	319.		600.	-18.0	-19.8	1.2		2.082
13	-	319.	6.9	.023			1.0		1.629
43	5	319.	7.6	.023			<b>60</b>		1.584
57	3						.7		1.873
74	6	318.	7.9	010.			.7	286.6	.827
86	6						9.		.895
3046.	575.2	317.	8.1	100.	-28.0	-30.2	.5	287.3	7.025
19	3.						4.	288.4	7.371
35	-	318.	4.6	.043			•3	288.4	.155
65	1.	321.	11.8	610.			• 2	288.5	.237
86	2.						• 2	288.4	121
95	5	322.	12.5	.023		-42.2	.2	288.3	-1.566
03	0	322.	13.1	.079	-36.8		• 2	288.2	979

ARMY DUGWAY PROVING GROUND UTAH
TURBULENCE MEASUREMENTS ON A FORTY-EIGHT METER TOWER IN DESERT --ETC(U)
OCT 77 A W WALDRON AD-A049 036 UNCLASSIFIED NL 4 OF 5 AD AO49036 Maria Maria iii

# 4 OF AD A049036



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-4

Note: Pilot Balloon Data for the afternoon of 29/03/77 was not obtained.

PADIOSONJE DATE 30/03/77 TIME 05:00:00 LOCATION DPGWV

(M)	PRESS (MB)	WIND DIP (DEG)	U (W/S)	(*10) Za/na	TEMP (DEG C)	DEWPT (DEG C)	MR (GM/KG)	THV* (DEG K)	DTHV/DZ (*1000)
0.	-	265.	1.5	000.	-3.5	-7.4	2.5	281.3	000
14.	5				-3.4	-9.3	2.2	281.5	13.172
0	5.				-3.8	-6.8	2.7	282.1	6.567
3		258.	2.3	.050	-3.9	-6.8	2.7	282.5	8.441
0		232.	.5	123	4.4-	8.9-	2.1	283.5	099.9
-	2.				1-4-	-6.8	2.8	284.3	7.534
0	2.	270.	1.6	.036	4.9-	-7.6	2.7	284.5	.971
-	-				-8.2	-8.6	2.5	284.7	.952
-	-	273.	2.0	.013	-8.9	4.6-	5.4	285.0	2.683
21	:	264.	2.5	910.	-11.1	-12.1	2.0	285.8	2.562
50	+				-13.1	-14.6	1.7	286.6	2.792
52	3.	249.	2.8	.010	-13.2	-14.8	1.7	286.8	9.444
99		233.	2.7	100	-14.2	-16.6	1.5	287.0	1.631
28	5	233.	3.5	640.	-15.4	-18.5	1.3	287.4	2.509
1930.					1-91-	-19.8	1.2	287.8	3.028
13	1.	247.	5.5	990.	-17.9		1.0	287.9	.787
13	-				-17.9	-21.8	1.0	287.9	12.547
43	-	249.	1.6	690.	-19.9			289.0	3.446
99	2.				-21.3		9.	289.8	3.836
14	•	255.	8.2	.020	-22.0		5.	289.9	1.406
40	-	265.	7.5	023	-24.2		.5	290.8	2.903
28	2.				-26.1	-33.5	*.	291.3	1.917
35	2	262.	5.8	056	-26.6		*.	291.5	2.874
69	;	258.	4.6	039	-28.8	-	• 3	292.4	2.971
72	6				-29.3	-36.6	•3	292.6	2.952
96	2.	258.	5.0	.013	-30.7	-37.4	•3	293.7	4.642
12		259.	5.4	.024	-31.9	-38.4	•3	294.2	3.144
			0.						

\* VIRTUAL POTENTIAL TEMPERATURE

DAT 30/03			
HGT.	WIND DIR (DEG)	WIND SPEED	5
76.	19.0	1.6	
146.	3.0	2.1	
204.	360.0	1.7	
259.	49.0	1.8	
314.	62.0 34.0	1.8	
369. 424.	43.0	1.4	
479.	42.0	1.6	
533.	33.0	1.1	
588.	49.0	2.0	
643.	69.0	2.3	
698.	103.0	1.1	
753.	97.0	1.3	
808.	104.0	2.4	
863.	100.0	3.2	
918.	128.0	2.1	
972.	156.0 129.0	3.0 4.0	
1027.	127.0	4.0	
1137.	125.0	4.3	
1192.	136.0	6.2	
1247.	134.0	8.0	
1302.	131.0	8.2	
1356.	136.0	7.9	
1411.	148.0	8.0	
1466.	160.0	8.9	
1521.	159.0	8.7	
1576.	158.0 162.0	8.5	
1631.	162.0	8.8	
1741.	159.0	8.8	
1796.	156.0	8.5	
1851.	156.0	9.3	
1905.	158.0	9.0	
1960.	162.0	8.5	
2015.	163.0	9.0	

2.252 2.311 1.552 .069 2.450 16.045 4.720 2.618 2.394 3.063 1.576 1.321 3.447 2.783 3.120 .817 1.121 DIHVIDZ (\*1000) 2.984 (DEG K) 287.3 287.4 287.6 290.4 291.8 292.5 293.2 285.8 288.6 288.8 289.1 289.4 289.8 290.6 291.0 293.6 287.7 289.6 296.0 295.1 THV\* (GM/KG) 1.6 6. 2.3 1:1 DATE 31/03/77 TIME 05:00:00 LOCATION DPGWV (DEG C) -10.8 -15.7 -41.8 0.9--6.0 9.9--6.7 -7.2 -7.3 -9.3 -20.1 -24.4 -31.7 0.04-9.9--8.3 -14.2 -36.9 DEWPT -38.1 -28.1 (DEG C) 6.--19.6 -21.9 -22.8 -24.1 8. 9.--2.5 -9.7 TEMP 9.--1.9 8.9--7.4 -12.4 -15.0 -26.3 4.41--17.3 -28.5 -30.0 .205 .023 .023 (\*10) 640. .036 .059 .013 .045 .007 010. 20/00 .013 -.003 4.8 11.5 (M/S) 9.9 6.1 6.5 4.9 7:1 9.9 11.2 MIND DIR (DEG) 250. 204. 213. 235. 221. 205. 207. 213. 203. 213. 216. 221. 713.6 682.9 632.6 865.6 861.3 851.8 850.0 856.8 802.0 6.859 573.3 750.3 559.2 536.1 PRESS (MB) 7.177 142.3 122.8 8.999 514.0 833.3 810.3 RADIOSCNDE 1219. 1523. 3 129. 146. 305. 339. 528. 609. 780. 1135. 1828. 2132. 2741. 3171. 4158. 2044. 2437. 3655. 3959. ----

\* VIRTUAL POTENTIAL TEMPERATURE

DAT 31/03	E TIM /77 12:40	
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76. 146.	251.0 253.0	1.5
204.	253.0 249.0	1.3
314.	250.0 250.0	3.0
424. 479. 533.	248.0 257.0	2.8
588.	268.0 267.0 265.0	3.0 3.3 3.8
698. 753.	263.0 259.0	4.2
808.	249.0 242.0	4.2 3.5
918.	240.0	3.8 3.2
1027. 1082. 1137.	227.0 228.0 233.0	2 • 8 3 • 0 3 • 0
1192.	234.0	3.0
1302. 1356.	236.0 239.0	2.9
1411.	239.0 237.0	3.5 3.5
1521.	237.0 238.0	4.0
1631. 1686.	238.0 238.0	5.0 5.6

FADIC	ADIOSCNDE	DATE 01/04/77		TIME 05:0	05:00:00 LOCATION	TION DPSWV	> x		
7	PRESS	WIND DIR	n	20/00	TEMP	DEWPT	M.	THV*	DTHV/DZ
3	8	(DEG)	(M/S)	(*10)	(DEG C)	(DEG C)	(GM/KG)	(DEG K)	(*1000)
0	856.5	310.	7.7	000	1.7	-2.4	3.7	288.0	000
52.	851.0				6.	-2.7	3.7	287.6	-6.135
.19		284.	11.9	.689	6.	-2.8		287.7	10.299
158.					6.	-3.4	3.5	288.7	10.045
305.	824.6	281.	7.9	164	•2	-5.0			4.829
455.					5	9.9-	2.9	290.2	0.
609		252.	5.7	072	-1.9	-7.2	2.8		.702
.416		231.	4.9	.023	-4.8	•	2.7		.171
1144.	741.9				6.9-	-9.3	2.5	290.5	.504
1219.	734.7	232.	9.9	.007		-9.5	2.5		1.879
1523.	706.4	250.	5.7	030	8-6-	-10.4	2.4	291.3	2.383
1579.	701.3					9.01-	2.4		.827
1593.		255.	5.8	.014	-10.4	-10°7	2.4	291.4	2.937
1828.		270.	8.9	.043	-11.7	-12.0	2.2		4.583
2088.	656.3				-13.2	-13.5	2.0		4.299
2132.		280.	7.4	.020	-13.5	-13.8	2.0	293.8	3.516
2437.		300.	7.8	.013			1.7		3.553
2741.		310.	8.6	.026	-17.5	-18.3	1.5	295.9	3.560
3046.		312.	8.0	020		-20.6	1.3	296.9	3.122
3174.	568.0				-20.4	-21.5	1.2	297.4	3.798
3350.		312.	1.1	010	-21.8	-23.1	1:1	297.7	2.191
3655.	531.8	306.	8.5	.026		-25.7	6.	298.4	•
3959.	510.1	297.	8.8	010.		-28.3	۲.	299.0	2.094
4071.	502.3				-27.4	-29.3	.7	299.4	3.002
+104.	500.0	297.	8.1	048	-27.7	-29.6	9.	299.4	.740

DATE 01/04/7		
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
1631. 1686. 1741. 1796. 1851. 1905. 1960. 2015.	334.0 338.0 337.0 337.0 338.0 332.0 332.0 335.0	8.5 7.0 8.2 8.0 7.0 6.5 7.9 9.0

RADIOSCNDE DATE 04/04/77 TIME 05:00:00 LOCATION DPGWV

~ £	PRESS (MB)	WIND DIR	U (W/S)	20/00	TEMP (DEG C)	DEWPT	MR (GM/KG)	THV*	(*1330)
	1				-	-	1	-	1
.0	-	120.	3.6	0000	1.7	-5.4		86.	0000
57.	67.				3.8	-4.8		89.	6.8
13	62.				4.2	-5.1		89.	.33
9	56.				4.0	-5.2		.06	6.17
2	50.	250.	2.4	053	4.3	6.4-		291.2	5.29
-	40.					+.+-		92.	0.
0	10	324.	4.7	.060	3.0	4.4-		93.	69.
9	92.					4.4-	3.5	. 76	
-	80.	2		.079	6.	-4.7		. 46	1.489
-	51.	333.	8.5	•046		-5.4		95.	.33
2	23.	m		.043	4.4-	-6.1		295.5	.927
5	02.				4.9-	9.9-		.56	1.044
78	.00	337.	10.2	.016	9.9-	-6.8		95.	1.936
86	92.				-7.3	-7.5		95.	.882
96	83.				-7.3	-7.5		297.0	6.
08	72.				-8-1	-8.2		.16	3.660
13	.69	345.	11.2	.028	-7.8	6		98.	3
54	.69				-	-13.7		0	9.
43	43.	347.	13.0	.059	-	-16.1		0	8.363
11	20.					-19.5		34.	.39
8 1	13.					6	1.3	04.	.30
04	. 46	351.	14.5	.025	-8.7	-	1:1	0	-
61	83.					-23.1	1.3	08.	10.439
35	72.	358.	17.3	.092	6	4.	6.	.60	6.135
65	.64	2	•	.075	0	26.	. 3	-:	•
11	41.					-	.7	12.	
55	28.	355.	21.6	990.	2.			13.	8
10	-				•	6		13.	3.498
4263.	507.7	351.	22.6	.033	-14.5		9.	314.1	4.075
37	200 • 0	351.	5.	0000	-15.3		9.	314.8	25.250

DAT 04/04		
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76.	32.0	2.0
146.	350.0	1.8
204.	347.0	2.0
259.	320.0	.9
314.	267.0	.8
369.	298.0	1.1
424.	302.0	1.4
479.	312.0	2.0
533.	320.0	2.3
588.	320.0	2.9
643.	310.0	3.2
698.	305.0	3.5
753.	303.0	4.0
808.	298.0	3.8
863.	296.0	3.2
918.	308.0	3.0
972.	321.0	2.5
1027.	328.0	2.3
1082.	328.0	2.9
1137.	329.0	2.8
1192.	333.0	3.2
1247.	336.0	3.9
1302.	343.0	4.0
1356.	343.0	4.8
1411.	342.0	5.2
1466.	336.0	5.2
1521.	336.0	5.0
1576.	345.0	4.0
1631.	349.0	3.5
1686.	345.0	4.8
1741.	329.0	5.0
1796.	322.0	5.9
1851.	330.0	8.0
1905.	330.0	9.5
1960.	325.0	9.5
2015.	325.0	9.8

RADIDSONDE DATE 05/04/77 TIME 05:00:00 LOCATION DPSWV

7	S	WIND DIR	ח	20/00	TEMP	DEWPT	₹.	THV*	DIHVIDZ
3	NB	(DEG	(N/S)	(+10)	(DEG C)	(DEG C)	(64/KG)	(DEG K)	(*1000)
0	1 +	130.	1.5	000	5	-5.5		83.	000
40	6				•	8.1		0	3.65
3	0	222.	2.6	.047		6		95.	5.89
90	2.	174.	1.6	141	8.8	-1.0		.96	17.569
4	6					-1.0		.16	6.33
60	2.	268.	1.6	000				98.	.81
9	7.					-6.1		.66	.24
-	2.	318.	2.9	.043	5.1	-6.2		.66	13
21	3.	342.	5.0	690.	2.6	7-9-		.66	1.702
-	0				4.			.66	59
52	3	354.	5.8	.026	-:1	1.		.66	31
18	0	.,		017	-2.7			00	99
81	6				-2.8	-8.9		.00	-9.854
82	8	5.	5.3	000.	-2.8			30.	.47
95	1.				-3.2	-		.10	16.
13	2.	16.	5.5	003			2.5	01.	•
43	.9	12.	•	940.				01.	.42
578	5							31.	64.
74	1.	1.	9.6	660.	-9.5	-13.2		02.	.68
906	8							303.9	.55
04	-	355.	12.8	105	1.6-		.7	05.	
90	9					-27.6	.7	05.	
16	8				-9.5	7		.90	9.
35	4.	353.	14.5	• 056	-11.0	.9		07.	0
65	2.	5		039	-13.4	5	8.	98	.2
11	-				-13.9	25.	6.	08.	
3959.	530.5		6.6	112	-15.4	-24.9	6.	309.2	4.257
04	4.				-16.0	. 4	1.0	.60	4.
27	.6				-18.0	0	9.	.60	747.
40	.0	358	8.9	076	-10.1	0	5	00	1.694

HGT. WIND DIR WIND SPEED (M) (DEG) (M/S)  76. 285.0 1.0 146. 319.0 1.6 204. 322.0 2.5 259. 315.0 3.8 314. 311.0 3.7 369. 288.0 1.9 424. 248.0 2.1 479. 251.0 2.8 533. 256.0 1.8 588. 260.0 1.1 643. 312.0 1.2 698. 324.0 1.8 753. 312.0 1.1 808. 307.0 8 863. 330.0 1.3 918. 336.0 2.6 972. 331.0 2.5 1027. 312.0 1.8 1137. 295.0 1.0 1192. 297.0 1.5 1247. 311.0 2.0 1302. 306.0 2.3 1356. 286.0 3.5 1411. 275.0 3.2 1466. 280.0 3.3 1521. 284.0 3.5 1576. 280.0 3.2 1631. 273.0 3.0 1686. 270.0 2.8 1741. 263.0 2.5 1796. 251.0 2.3 1851. 254.0 1.5 1905. 277.0 9 1960. 277.0 8 2015. 300.0 3.3	DATE	TIME	PLACE OO DPGWV
(M)       (DEG)       (M/S)         76.       285.0       1.0         146.       319.0       1.6         204.       322.0       2.5         259.       315.0       3.8         314.       311.0       3.7         369.       288.0       1.9         424.       248.0       2.1         479.       251.0       2.8         533.       256.0       1.8         588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0	03/04/11	14.17.	OU DEGMA
(M)       (DEG)       (M/S)         76.       285.0       1.0         146.       319.0       1.6         204.       322.0       2.5         259.       315.0       3.8         314.       311.0       3.7         369.       288.0       1.9         424.       248.0       2.1         479.       251.0       2.8         533.       256.0       1.8         588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0	HGT. W	IND DIR	WIND SPEED
146.       319.0       1.6         204.       322.0       2.5         259.       315.0       3.8         314.       311.0       3.7         369.       288.0       1.9         424.       248.0       2.1         479.       251.0       2.8         533.       256.0       1.8         588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.2         1576.       280.0			
146.       319.0       1.6         204.       322.0       2.5         259.       315.0       3.8         314.       311.0       3.7         369.       288.0       1.9         424.       248.0       2.1         479.       251.0       2.8         533.       256.0       1.8         588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.2         1576.       280.0			
204.       322.0       2.5         259.       315.0       3.8         314.       311.0       3.7         369.       288.0       1.9         424.       248.0       2.1         479.       251.0       2.8         533.       256.0       1.8         588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1576.       280.0       3.2         1631.       273.0			
259.       315.0       3.8         314.       311.0       3.7         369.       288.0       1.9         424.       248.0       2.1         479.       251.0       2.8         533.       256.0       1.8         588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0 </td <td></td> <td></td> <td>1.6</td>			1.6
314.       311.0       3.7         369.       288.0       1.9         424.       248.0       2.1         479.       251.0       2.8         533.       256.0       1.8         588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0 <td></td> <td></td> <td>2.5</td>			2.5
369.       288.0       1.9         424.       248.0       2.1         479.       251.0       2.8         533.       256.0       1.8         588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1796.       251.0 </td <td></td> <td></td> <td></td>			
424.       248.0       2.1         479.       251.0       2.8         533.       256.0       1.8         588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1796.       251.0       2.3         1851.       254.0<			
479.       251.0       2.8         533.       256.0       1.8         588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0			
533.       256.0       1.8         588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.			
588.       260.0       1.1         643.       312.0       1.2         698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .8         2015.       300.0       .3			
643. 312.0 1.2 698. 324.0 1.8 753. 312.0 1.1 808. 307.0 .8 863. 330.0 1.3 918. 336.0 2.6 972. 331.0 2.5 1027. 312.0 1.8 1082. 303.0 1.1 1137. 295.0 1.0 1192. 297.0 1.5 1247. 311.0 2.0 1302. 306.0 2.3 1356. 286.0 3.5 1411. 275.0 3.2 1466. 280.0 3.3 1521. 284.0 3.5 1576. 280.0 3.2 1631. 273.0 3.0 1686. 270.0 2.8 1741. 263.0 2.5 1796. 251.0 2.3 1851. 254.0 1.5 1905. 277.0 .9 1960. 277.0 .9			
698.       324.0       1.8         753.       312.0       1.1         808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .8         2015.       300.0       .3			
753. 312.0 1.1 808. 307.0 .8 863. 330.0 1.3 918. 336.0 2.6 972. 331.0 2.5 1027. 312.0 1.8 1082. 303.0 1.1 1137. 295.0 1.0 1192. 297.0 1.5 1247. 311.0 2.0 1302. 306.0 2.3 1356. 286.0 3.5 1411. 275.0 3.2 1466. 280.0 3.3 1521. 284.0 3.5 1576. 280.0 3.2 1631. 273.0 3.0 1686. 270.0 2.8 1741. 263.0 2.5 1796. 251.0 2.3 1851. 254.0 1.5 1905. 277.0 .9 1960. 277.0 8 2015. 300.0 .3			
808.       307.0       .8         863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .8         2015.       300.0       .3			
863.       330.0       1.3         918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .8         2015.       300.0       .3			
918.       336.0       2.6         972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
972.       331.0       2.5         1027.       312.0       1.8         1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			2.6
1082.       303.0       1.1         1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3	972.	331.0	
1137.       295.0       1.0         1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3	1027.	312.0	1.8
1192.       297.0       1.5         1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1247.       311.0       2.0         1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1302.       306.0       2.3         1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1356.       286.0       3.5         1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1411.       275.0       3.2         1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1466.       280.0       3.3         1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1521.       284.0       3.5         1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1576.       280.0       3.2         1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1631.       273.0       3.0         1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1686.       270.0       2.8         1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1741.       263.0       2.5         1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1796.       251.0       2.3         1851.       254.0       1.5         1905.       277.0       .9         1960.       277.0       .8         2015.       300.0       .3			
1851. 254.0 1.5 1905. 277.0 .9 1960. 277.0 .8 2015. 300.0 .3			
1905. 277.0 .9 1960. 277.0 .8 2015. 300.0 .3			
1960. 277.0 .8 2015. 300.0 .3			
2015. 300.0 .3			
	2015.	300.0	

8.142 2.844 2.475 2.968 3.982 5.007 98.359 3.876 5.912 1.535 9.303 1.804 694. 1.356 4.826 4.345 4.427 1.737 908. 6.591 5.209 (0001\*) 1.143 (DEG K) 298.8 301.6 302.4 303.0 303.4 304.1 305.0 306.4 298.1 30008 305.4 308.0 310.5 300.7 308.5 309.4 (GM/KG) 5.0 1.9 1.7 1.4 DATE 06/04/77 TIME 05:00:00 LOCATION DPGWV (DEG C) -.5 -.1-3 -3-7 -30.9 -6.4 -10.1 -9.9 -11.3 -16.0 -24.6 -27.2 -20.6 DEWPT -14.3 -18.7 -28.1 1.4-(DEG C) TEMP 111.3 10.2 9.7 7.6 5.4 -10.9 11.4 4.0 3.4 -2.2 -3.9 1.9--8.5 -8.5 -10.1 === -1.3 .026 (\*10) -.026 .042 .000 -.013 .013 .026 20/00 -.013 .102 · 095 2.5 2.2 5.8 2.8 8.5 1.9 5.7 7.3 (M/S) WIND DIR (DEG) 70. 22. 334. 334. 313. 245. 308. 306. 286. 234. 197. 242. 153 154 146 240. 700.4 843.4 819.3 736.2 720.8 624.2 624.2 607.6 600.4 599.1 (MB) 783.5 8.499 567.3 554.7 537.8 755.0 813.1 RADIOSCNDE 1828. 1833. 2132. 914. 1219. 1426. 1523. 2247. 2926. 3046. 3062. 3655. 305. 547. 1598. 2741. 3350. 3483. 609 240. 2437. 3892. 3959.

DATE 06/04/1	TIME 77 14:55:	
HGT. (M)	WIND DIR (DEG)	WIND SPEED (M/S)
76.	3.0	1.4
146.	57.0	.8
204. 259.	111.0 118.0	1.0
314.	93.0	1.3
369.	73.0	1.7
424.	69.0	1.5
479.	77.0	1.8
533.	86.0	1.6
588.	125.0	1.4
643.	161.0	1.8
698.	172.0	2.3
753.	170.0	3.1
808.	164.0	3.0
863.	159.0	3.2
918.	162.0	3.7
972.	166.0	4.2
1027.	172.0	4.6
1082. 1137.	171.0 176.0	4.8
1192.	185.0	4.8
1247.	188.0	4.8 5.2
1302.	195.0	5.5
1356.	199.0	5.7
1411.	191.0	5.9
1466.	184.0	6.0
1521.	186.0	5.0
1576.	202.0	3.2
1631.	224.0	2.5
1686.	233.0	2.6
1741.	224.0	2.9
1796.	221.0	2.8
1851.	252.0	2.3
1905.	279.0	3.0
1960.	274.0	3.5
2015.	276.0	4.4

(DEG K) 301.0 304.0 304.7 306.3 306.8 307.1 307.2 291.9 298.7 331.2 331.7 334.1 335.7 335.8 306.3 \*AH.1 (GM/KG) 1.9 (DEG C) -13.6 -14.5 -3.6 -8.0 6.4--10.2 -12.5 -15.4 -4.8 -11.3 -12.4 DEMPT -3.1 1.6--15.6 -16.4 -11.1 (DEG C) -1.9 2.0 12.6 13.8 13.8 12.9 10.9 6.1 -2.0 3.2 5.7 -5.7 3.1 (\*10) .036 0000 660. .010 .020 .026 910. 0000 010 --.003 20/00 .007 .027 (M/S) 6.8 8.8 8.0 8.5 9.5 6.1 7.1 > WIND DIR (DEG) 232. 195. 159. 174. 81. 130. 197. 218. 219. 227. 231. 230. SSEAD 783.6 850.0 8.699 6.649 6.898 842.9 812.9 8118 755.3 727.9 618.3 863.0 732.3 701.1 700.0 675.2 625.4 7 106. 220. 234. 305. 609. 1219. 2132. 1523. 50. 620. .416 2741. .6581 2437. 2832. 3046.

9.879

6.928

20.798

46.792

0144/02

DATE 07/04/77 TIME 05:00:00 LOCATION DPGWV

BUNDSOLDAR

7.625

10.426

2.043

1.762

1.662 2.011 1.601 3.062

.608

.921

1.764

307.0

1.00

6.01-

-11.0 -13.9 -16.8

.007

9.6

232.

578.4 555.6 533.8

3350.

3655.

3959.

40c5.

4263.

4447

578.8

3345.

.361 .173 .100

307.0

-18.2

.010

-20.6

-19.6

000.

9.6

-.005

257.

-21.2

307.1

\* VIRTUAL POTENTIAL TEMPERATURE

DATE 07/04/77	TIME 15:59:00	PLACE
HGT. W	IND DIR W	IND SPEED
(M)	(DEG)	(M/S)
76.	105.0	1.0
146.	132.0	•1
204.	345.0	• 7
259.	12.0	1.1
314.	16.0	1.4
369.	7.0	1.0
424. 479.	30.0	. 9
533.	16.0	1.2
588.	330.0 296.0	1.4
972.	297.0	1.6
1027.	298.0	3.5
1082.	303.0	3.8
1137.	306.0	4.0
1192.	296.0	3.8
1247.	286.0	2.7
1302.	279.0	2.0
1356.	272.0	2.5
1411.	271.0	3.7
1466.	259.0	5.0
1521.	247.0	5.2
1576.	234.0	3.2
1631.	204.0	2.5
1686.	196.0	3.1
1741.	190.0	3.5
1796.	189.0	3.8
1851.	210.0	4.5
1905.	210.0	5.1
1960.	222.0	5.0
2015.	207.0	9.5

1.942 780.11 096.6 1.484 1.003 -.559 -.257 25.768 7.124 6.936 3.263 8.733 8.137 .849 1.182 -.361 3.789 3.121 308.6 308.8 309.1 308.9 309.0 312.3 304.0 306.5 309.2 304.1 305.4 306.4 309.1 309.0 333.1 (GM/KG) 1.9 1.6 DATE 08/04/77 TIME 05:00:00 LOCATION DPGWV (DEG C) -11.8 -17.8 -14.0 -15.3 -17.1 -17.5 -29.4 -8.8 -10.3 -10.8 -16.2 -6.3 -5.2 1.9-9.9--9.5 DEWPT -14.4 -34.2 -34.3 -34.5 -34.6 -8.5 -9.2 -10.3 14.0 13.1 13.0 12.1 10.8 -9.2 16.4 16.5 10.2 23.00 -.3 -3.4 4.9--7.9 -10.5 101\*) -.010 -.023 0000 0000 .200 690. 010. -.003 -.010 .003 .043 -.030 -.056 -.013 -.021 10.4 1.0 0.6 7.3 7.1 (N/S) 3.1 8.9 10.2 8.3 0.6 9.1 9.1 WIND DIR (DEG) 170. 201. 182. 281. 125. 216. 186. 181. 218. 206. 180. 198. 250. 182 858.3 850.0 781.9 767.3 753.8 569.8 4.118 848.8 840.5 810.7 191.8 745.8 726.5 683.8 674.3 6.859 624.6 601.1 590.3 578.2 574.8 535.8 534.4 0.00 PRESS (MB) 8.767 RADIOSCNDE 3464. 1308. 1523. 1828. 3046. Ξ 222. 2021. 3350. 127. 210. 609 745. 914. 1071. 1219. 3939. 808 2437. 3959. 4263. 4466. ---

DATE 08/04/77	TIME 15:08:0	
HGT. W	IND DIR (DEG)	WIND SPEEC (M/S)
76. 146. 204. 259. 314. 369. 424. 479. 533. 588. 643. 698. 753. 808. 863. 918. 972. 1027. 1082. 1137. 1192. 1247.	193.0 193.0 196.0 198.0 200.0 199.0 188.0 184.0 189.0 186.0 184.0 185.0 186.0 185.0 186.0	9.2 11.3 12.4 12.8 10.9 6.4 3.9 2.5 2.2 5.7 11.0 11.0 11.0 12.3 14.5 18.0 22.9 30.9 31.8
1302. 1356. 1411. 1466. 1521. 1576.	186.0 188.0 189.0 190.0 190.0	35.0 43.8 29.0 36.6 63.0 64.0

Preceding Page BLank - FILMED

#### APPENDIX C

# SPECIAL RAWINSONDE AND PILOT BALLOON DATA DUGWAY PROVING GROUND

#### NOTE

Rawinsonde data were obtained every three hours for parts of four days and all of one day. Pilot balloon observations were obtained between rawinsondes.

On two days, rawinsondes were taken at 1200 and 1400. On a third day a rawinsonde was taken at 1200 and on a fourth day at 2100.

RADIOSCNDE DATE 24/02/77 TIME 09:00:00 LOCATION DPGWV

(F)	PRESS (MB)	WIND DIR	(M/S)	(*10)	(DEG C)	(DEG C)	(GM/KG)	(DEG K)	(*1000
	67.	270.	3.6	000	.2	-5.8	2.9	285.2	000
9	50.	286.	12.7	.558	-1.0	-8.8	2.3	285.5	1.976
0	35.	289.	10.5	155	-2.1	-11.5	1.9	285.7	1.590
	19.				3.3	-14.2	1.5	285.9	1.187
.609	803.3	297.	0.6	049	7.4-	-14.4	1.6	286.1	1.117
-	72.	306.	8.0	033	-7.4	-14.7	9.1	286.4	1.020
-	42.	313.	8.7	.023	-10.2	-15.0	1.6	286.6	.596
5	20.				-12.4	-15.3	1.6	286.7	.55
2	14.	322.	10.5	.059	-12.8	-15.9	1.5	287.0	3.84
-	.00	328.	9.11	.073	-13.9		1.4	287.3	2.659
2	85.	332.	11.9	610.	-15.1	-18.5	1.3	287.7	2.12
3	58.	339.	11.3	020	-17.4		1.1	288.4	2.353
3	32.	345.	9.1	072	9.61-		6.	289.2	2.564
2	25.		-		-20.3		8.	289.4	2.301
4	.90	346.	7.8	043	-22.2	-26.6	.7	289.6	1.128
4	.18	342.	7.6	007	-24.8	-29.5	9.	290.1	1.454
5	57.	335.	7.6	0000	-27.4	-32.4	4.	290.5	1.337
S	35.	321.	8.0	.013	-30.1	35.3	.3	290.7	.839
2	30.				-30.6	-35.9	•3	290.9	2.27
S	12.	309.		.030	-32.7	-38.2	• 3	291.2	1.192
3	.00	306.	9.2	.017	-34.2	-40.0	.2	291.4	1.30

DAT 24/02		
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(4/5)
76.	304.0	9.1
146.	301.0	5.7
204.	298.0	4.4
259.	299.0	5.3
314.	299.0	5.5
369.	298.0	4.5
424.	298.0	4.2
479.	297.0	4.6
533.	299.0	4.8
588.	303.0	4.9
643.	307.0	4.1
698.	308.0	3.6
753.	310.0	4.1
808.	314.0	4.5
863.	314.0	4.6
918.	315.0	4.6
972.	315.0	5.4
1027.	313.0	5.7

RADIDSCNDE DATE 24/02/77 TIME 12:00:00 LOCATION DPGWV

MAIN DIP   MAIN DIP   MAIN DIP   MAIN DEWPT   MAIN DIP   MAIN DI										
862.0       3.5.       5.4       .000       3.8       -6.5       2.7       286.4       -4         862.0       3.05.       9.8       .268       .0       -14.1       1.5       286.4       -4         835.0       312.       8.4       -099       -1.4       -14.6       1.5       286.4         835.0       312.       8.6       -013       -1.4       1.5       286.4         773.1       316.       7.5       -016       -7.7       -16.0       1.4       286.0         743.3       321.       6.5       -033       -10.6       -17.4       1.3       286.0         744.2       321.       6.5       -033       -10.6       -17.4       1.3       286.0         744.2       321.       6.5       -039       -13.2       -18.1       1.3       286.0         744.2       321.       6.5       -039       -13.2       -18.1       1.3       286.0         744.2       322.       4.8       -033       -14.6       -17.4       1.3       286.0         686.0       329.       4.8       -033       -14.6       -17.4       1.3       286.0         677.0	~ 3	PRESS (MB)	WIND DIR	U (W/S)	00102	(DEG C)	DEWPT	MR (GM/KS)	THV.	0THV/DZ (*1300)
862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  862.0  86		867.6	315.	5.4	000.	3.8	-6.5	2.7	288.9	.000
650.0       305.       9.8       .268       .0       -14.4       1.5       286.4         835.0       312.       8.4      099       -1.4       -14.6       1.5       286.4         803.5       314.       8.0      013       -4.6       -15.2       1.5       286.0         778.0       316.       7.5      016       -7.7       -16.0       1.4       286.0         742.2       321.       6.5      033       -10.6       -17.4       1.3       286.0         742.2       327.       6.5      039       -13.2       -18.1       1.3       286.0         742.2       700.0       328.       4.8      039       -13.2       -18.1       1.3       286.0         714.1       327.       5.3      039       -13.2       -18.1       1.3       286.5         686.0       329.       4.8      033       -11.5       -18.5       1.3       286.5         677.0       329.       4.5       .007       -17.9       -21.5       1.0       287.8         658.9       320.       4.5       .007       -27.9       -28.0       590.2         592.0 <td< td=""><td>m.</td><td>862.0</td><td>1</td><td></td><td></td><td>1:1</td><td>-14.1</td><td>1.5</td><td>286.4</td><td>-47.170</td></td<>	m.	862.0	1			1:1	-14.1	1.5	286.4	-47.170
835.0 312. 8.4099 -1.4 -14.6 1.5 286.4 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0 178.0	164.	650.0	335.	9.6	.268	0.	-14.4	1.5	286.4	049
803.5       314.       8.0       -013       -4.6       -15.2       1.5       286.2         778.0       773.1       316.       7.5       -016       -7.7       -16.0       1.4       286.0         743.3       321.       6.5       -033       -10.6       -17.4       1.3       286.0         742.2       321.       6.5       -033       -10.6       -17.4       1.3       286.0         742.2       327.       6.5       -039       -13.2       -18.1       1.3       286.0         740.0       328.       4.8       -039       -14.5       -18.5       1.3       286.7         686.0       329.       4.3       -033       -14.5       -18.5       1.3       286.7         686.0       329.       4.3       -033       -15.8       18.6       1.3       286.7         686.0       329.       4.5       -007       -17.9       -21.5       1.0       287.8         658.9       320.       4.5       -007       -22.9       -29.5       6       290.7         597.0       321.       5.9       -02.0       -27.4       -27.4       290.9         597.2       321.<	305.	835.0	312.	8.4	660	-1.4	-14.6	1.5	286.4	092
778.0 778.0 773.1 316. 7.5016 -7.7 -16.0 1.4 286.0 743.3 321. 6.5033 -10.6 -17.4 1.3 286.0 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 742.2 743.3 742.2 743.3 743.3 743.3 744.2 744.3 744.2 744.3 744.2 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3 744.3	.609	803.5	314.	8.0	013	9.4-	-15.2	1.5	286.2	807
773.1 316. 7.5016 -7.7 -16.0 1.4 286.0 743.3 321. 6.5033 -10.6 -17.4 1.3 286.0 742.2 742.2 714.1 327. 6.5039 -13.2 -18.1 1.3 286.0 710.0 328. 4.8033 -14.5 -18.5 1.3 286.5 1.3 286.7 686.0 329. 4.3033 -14.5 -18.6 1.3 286.7 686.0 329. 4.3033 -15.8 -18.8 1.3 286.9 677.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	865.	778.0				-7.2	-15.7	1.4	286.0	573
743.3 321. 6.5033 -10.6 -17.4 1.3 286.0 742.2 742.2 742.2 714.1 327. 5.3039 -13.2 -18.1 700.0 328.	. 416	773.1	316.	1.5	910	-7.7	-16.0	1.4	286.0	532
742.2 714.1 327. 5.3039 -13.2 -18.1 700.0 328. 4.8033 -14.5 -18.5 700.0 329. 4.3033 -14.5 -18.6 686.0 329. 4.3033 -15.8 -18.6 687.0 686.0 329. 4.5 .007 -17.9 -21.5 635.0 632.5 317. 5.3 .026 -19.9 -25.0 632.5 632.5 317. 5.3 .026 -19.9 -25.0 629.7 657.0 321. 6.3 .013 -24.6 -29.5 657.7 557.0 557.0 557.7 5512.2 5330. 5.5026 -34.7 558.8 529.9 520.7 520.9 520.9 520.9 520.9 520.9 520.9 520.9 520.9 520.9 520.9 520.9	1219.	743.3	321.	6.9	033	9.01-	-17.4	1.3	286.0	.180
714-1       327.       5.3      039       -13.2       -18.1       1.3       286.5         700.0       328.       4.8      033       -14.5       -18.5       1.3       286.7         686.0       329.       4.3      033       -15.8       -18.6       1.3       286.9         677.0       320.       4.5       .007       -17.9       -21.5       1.0       287.8         632.5       317.       5.3       .026       -19.7       -24.8       .8       288.8         632.5       317.       5.3       .026       -19.9       -25.0       .8       288.8         627.0       319.       5.9       .020       -22.1       -27.9       .7       289.7         582.0       321.       6.3       .013       -24.6       -29.5       .6       290.2         582.0       321.       6.5       .007       -27.4       -29.5       .6       290.5         557.7       323.       6.3       -007       -27.4       -29.5       .6       290.5         534.5       323.       6.3       -007       -27.4       -29.5       .6       290.5         534.5       323. <td>1230.</td> <td>742.2</td> <td></td> <td></td> <td></td> <td>-10.7</td> <td>-17.5</td> <td>1.3</td> <td>286.0</td> <td>496.</td>	1230.	742.2				-10.7	-17.5	1.3	286.0	496.
700.0       328.       4.8      033       -14.5       -18.5       1.3       286.7         686.0       329.       4.3      033       -15.8       -18.6       1.3       286.9         677.0       320.       4.5       .007       -17.9       -21.5       1.0       287.8         632.5       317.       5.3       .026       -19.7       -24.8       .8       288.8         632.5       317.       5.3       .026       -19.9       -25.0       .8       288.8         632.5       317.       5.3       .026       -19.9       -25.0       .8       288.8         667.0       319.       5.9       .020       -22.1       -27.1       .7       289.7         597.0       321.       6.3       .013       -24.6       -29.5       .6       290.2         557.7       321.       6.5       .007       -27.4       -32.1       .5       290.5         534.5       323.       6.3       -0.07       -34.7       .3       .4       290.7         500.0       328.       5.4      006       -34.6      05.9       .3       .9       .9         500.0	1523.	714.1	327.	5.3	039	-13.2	-18.1	1.3	286.5	1.424
686.0 329. 4.3033 -15.8 -18.8 1.3 286.9 677.0 677.0 -10.0 -10.6 -19.1 1.2 287.1 658.9 320. 4.5 .007 -17.9 -21.5 1.0 287.8 632.5 317. 5.3 .026 -19.9 -25.0 .8 288.8 632.5 317. 5.9 .020 -22.1 -27.1 .7 289.7 597.0 321. 6.3 .013 -24.6 -29.5 .6 290.2 597.7 321. 6.5 .007 -27.4 -32.1 .5 290.5 512.2 330. 5.5026 -33.0 -37.3 .3 290.9 500.0 328. 5.4006 -34.6 -26.8 .3 290.9	1675.	70000	328.	4.8	033	-14.5	-18.5	1.3	286.7	1.281
677.0	1828.	686.0	329.	4.3	033	-15.8	-18.8	1.3	286.9	1.378
632.5 317. 5.3 .026 -19.7 -24.8 .8 288.8 .8 632.5 317. 5.9 .026 -19.9 -25.0 .8 288.8 .8 287.0 .257.0 .22.1 -27.1 .7 289.7 .257.0 .321. 6.3 .013 -24.6 -29.5 .6 290.2 .557.7 321. 6.5 .007 -27.4 -32.1 .5 290.5 .5 290.5 .5 234.5 323. 6.3 -007 -37.4 -37.3 .3 290.9 .5 500.0 328. 5.4006 -34.6 -26.8 .3 290.9	1929.	677.0			4	-16.6	-19.1	1.2	287.1	1.858
632.5 317. 5.3 .026 -19.7 -24.8 .8 288.8 . 652.5 319. 5.9 .026 -19.9 -25.0 .8 288.8 .7 289.7 .7 289.7 .7 289.7 .25.0 .8 288.8 .7 289.7 .7 289.7 .2 29.2 .5 29.2 .5 29.2 .5 29.5 .6 290.5 .5 294.5 .2 323. 6.3 .013 -24.6 -29.5 .6 290.5 .5 294.5 .3 29.9 .5 290.5 .9 257.7 321. 6.3 .007 -27.4 -32.1 .5 290.5 .5 290.5 .9 292.0 .9 252.2 330. 5.5026 -33.0 -37.3 .3 290.9 .9 290.9 .9 290.0 .9 228.	2132.	658.9	320.	4.5	.007	-17.9	-21.5	1.0	287.8	3.603
632.5 317. 5.3 .026 -19.9 -25.0 .8 288.8 .7 .25.0 .22.1 -27.1 .7 289.7 .257.0 .257.0 .7 289.7 .257.0 .257.0 .7 289.7 .257.0 .257.0 .6 290.2 .257.1 .7 289.7 .257.0 .257.1 .7 289.7 .257.7 321. 6.3 .013 -24.6 -29.5 .6 290.5 .257.7 321. 6.5 .007 -27.4 -32.1 .5 290.5 .290.5 .257.2 330. 5.5026 -33.0 -37.3 .3 290.9 .290.9 .200.0 .228. 5.4006 -34.658.8 .3 290.9	2408.	635.0				-19.7	-24.8	8.	288.8	3.495
607.0 319. 5.9 .020 -22.1 -27.1 .7 289.7 .597.0 .597.0 .6 290.2 .6 290.2 .6 290.2 .6 290.2 .6 290.2 .6 290.3 .257.7 321. 6.5 .007 -27.4 -32.1 .5 290.5 .5 290.5 .5 290.5 .9 257.7 323. 6.3007 -30.7 -34.7 .4 290.7 .5 290.9 .9 290.0 328. 5.4006 -34.658.8 .3 290.9	2437.	632.5	317.	5.3	.026	6.61-	-25.0	. 8	288.8	3.306
597.0 582.0 582.0 582.0 582.0 582.0 582.0 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 557.7 55	2741.	607.0	319.	5.9	.020	-22.1	-27.1		289.7	2.833
582.0       321.       6.3       .013       -24.6       -29.5       .6       293.3         557.7       321.       6.5       .007       -27.4       -32.1       .5       290.5         534.5       323.       6.3      007       -30.2       -34.7       .4       290.7         512.2       330.       5.5      026       -33.0       -37.3       .3       290.9         500.0       328.       5.4      006       -34.6      58.8       .3       290.9	2863.	597.0				-22-9	-28.0	9.	290.5	3.642
557.7 321. 6.5 .007 -27.4 -32.1 .5 290.5 534.5 323. 6.3007 -30.2 -34.7 .4 290.7 512.2 330. 5.5026 -33.0 -37.3 .3 290.9 500.0 328. 5.4006 -34.658.8 .3 290.9	3046.	582.0	321.	6.3	.013	-24.6	-29.5	9.	293.3	.665
. 512.2 330. 5.5007 -30.2 -34.7 .4 290.7 . 512.2 330. 5.5026 -33.0 -37.3 .3 290.9 . 500.0 328. 5.4006 -34.6 -58.8 .3 290.9	3350.	557.7	321.	0.5	100.	-27.4	-32.1	.5	290.5	.769
. 512.2 330. 5.5026 -33.0 -37.3 .3 293.9 . 500.0 328. 5.4006 -34.6 -58.8 .3 290.9	3655.	534.5	323.	6.3	001	-30.2	-34.1	4.	290.7	609.
. 500.0 328. 5.4006 -34.6 -38.8 .3 290.9	3959.	512.2	330.	5.5	026	-33.0	-37.3	.3	290.9	.528
	4132.	500.0	328.	5.4	006	-34.6	-28.8	.3	290.9	.316

\* VIRTUAL POTENTIAL TEMPERATURE

DATE		
24/02/	77 14:00:	OO DPGWV
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	333.0	6.3
146.	331.0	5.8
204.	332.0	4.9
259.	333.0	4.1
314.	333.0	4.2
369.	335.0	4.6
424.	335.0	4.4
479.	330.0	3.1
533.	329.0	3.5
588.	330.0	2.2
643.	330.0	1.9
698.	325.0	2.3
753.	324.0	3.3
808.	325.0	3.6

5.163 6.067 1.366 1.586 -.165 .170 .298 .816 .425 .100 .757 .255 -2.008 -1.672 -1.983 -1.763 -5.010 -.384 060.-(0001\*) -.121 (DEG KI 287.3 287.4 289.2 290.4 287.7 290.9 291.0 238.7 287.2 287.7 289.0 288.4 287.8 287.3 287.2 290.8 290.5 THV\* (SM/KG) 1.6 1.8 1.4 1.3 1.0 2.0 1.3 1:1 1.1 DATE 24/02/77 TIME 15:00:00 LOCATION DPS#V (DEG C) -10.9 DEWPT -14.3 -17.6 -23.6 -26.4 -34.6 9.04--17.5 -21.5 -45.4 -16.5 -16.6 -24.0 -41.3 -19.4 -20.4 -38.9 TEMP (OFG C) 9.61--12.4 -18.5 -21.9 2.9 -3.1 9.6--27.1 -32.9 -6.5 -28.1 -18.0 -24.5 -29.9 -6.6 -15.2 1.01--20.1 -.033 2.143 0000 .039 000. -.031 0000. .050 .013 -.104 -.026 -.036 20/00 ((11) -.034 -.020 6.3 7.0 8.8 5.50 5.1 4.6 9.5 9.7 8.2 5.5 5.1 (N/S) WIND DIR (DE 6) 330. 321. 313. 312. 311. 312. 340. 0 338. 308 327. 311. PRESS (MP) 850.0 1.458 712.7 713.8 658.8 654.3 6.185 5.865 534.9 624.2 249.0 733.0 PU2.8 172.0 743.0 700.0 £32.4 965.6 606.7 RACIOSCNDE 1523. 1672. 1828. 2132. 2184. 2741. 3046. 3471. 3655. 3 154. 609 914. 921. 219. 2437. 2534 4133

24/02/1		
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76.	34.0	6.5
146. 204.	32.0 30.0	6.0 4.9
259.	29.0	5.0
314.	29.0	5.3
369.	25.0	4.5
424.	2.0	3.6
479.	330.0	3.1
533.	303.0	2.2
588.	277.0	1.8
643.	284.0	1.8
698.	304.0	2.1
753.	292.0	2.1
808.	282.0	2.7
863.	298.0	3.1
918.	318.0	3.5
972.	323.0	4.6
1027.	319.0	5.4
1082.	312.0	5.3
1137.	311.0	5.4
1192.	312.0	5.6
1247.	316.0	5.1
1356.	314.0.	4.9 5.1
1411.	312.0	4.6
1466.	303.0	4.9
1521.	291.0	4.6
1579.	282.0	4.5
1631.	279.0	4.9
1686.	281.0	5.4

RADIDSGNDE DATE 24/02/77 TIME 18:00:00 LOCATION DPSWV

~ ?	PRESS (MB)	WIND DIR	(8/K)	107*1	TEMP (DEG C)	DEWPT	MR (GM/KG)	THV* (DEG K)	0THV/02 (*1000)
0	66.	360.	3.6	000	1.4	6.9-	2.6	286.5	.000
35.	62.				1.1		1.8	286.4	-2.534
151.	50.	351.	4.4	.053	0.		1.3	280.5	.338
305.	833.6	12.	4.3	900	-1.4	-12.2	1.8	286.6	.781
.609	02.	352.		003	-4.2		1.1	236.8	.554
.416	71.	335.		010.	-7.1	-14.0	1.1	286.8	.126
956	67.				-7.5	-14.2	1.7	286.8	.761
206.	43.				1-6-	-15.0	1.6	237.0	.855
219.	42.	330.		.033	8.6-	-15.1	1.6	287.1	2.528
573.	13.	327.		000.	-12.5	-17.9	1.3	287.3	.871
566.	00	326.	6.7	.084	-13.7	-19.1	1.2	287.5	1.335
828.	85.	325.		900.	-15.1	-20.6	1:1	287.7	1.037
915.	77.				-15.9	-21.3	1.0	287.7	.453
132.	57.	324.	6.7	003	-17.7	-22.7	6.	288.1	1.749
437.	31.	326.	6.0	023	-20.5	-24.5	8.	288.1	1.758
741.	.90	325.	5.5	910	-22.6	-26.4		289.3	2.041
.003	85.				-24.8	-28.0	0.	289.0	1.348
046.	81.	320.	5.0	016	-25.1	-28.5	9.	289.8	3.314
350.	57.	314.	3.9	036	-27.1	-32.1	.5	290.2	1.550
655.	523.3	310.	1.1	372	-30.3	-35.6	.3	290.7	1.426
.956	5111.5	314.	4.1	610.	-32.9	-39.5		291.1	1.324
121.	500.0	320.	3.8	319	-34.3	1.14-	. 2	291.3	1.142

DATE	TIM	E PLACE
24/02/	777 20:00	:00 DPGWV
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	321.0	4.1
146.	346.0	3.9
204.	350.0	3.4
259.	337.0	4.0
314.	335.0	5.1
369.	340.0	5.2
424.	349.0	5.0
479.	354.0	4.8
533.	358.0	4.7
588.	3.0	4.5
643.	6.0	4.6
698.	6.0	4.9
753.	6.0	5.3

7.506 1.530 1.675 26602 4.056 -.639 2.067 1.423 1.984 1.371 1.414 1.730 7.208 -.585 2.942 2.328 ..889 .400 DIHVIDZ (\*1000) (DEG K) 287.0 287.5 288.0 284.9 286.0 285.8 288.4 289.5 285.7 286.7 288.1 290.1 286.5 282.7 283.9 283.6 (GM/KG) 34567880124 === DPGWV (DEG C) -5.5 -7.3 -8.7 -13.6 -17.3 -31.6 -13.6 -14.8 -16.2 -21.6 -34.3 -36.5 -36.8 -37.7 -15.3 DEWPT -21.4 DATE 24/02/77 TIME 21:00:00 LOCATION (DEG C) -15.8 -18.3 -20.8 -2.6 -5.1 -8.0 -11.0 -14.5 -23.3 -28.3 -30.8 -2.2 -10.7 -21.1 -33.4 TEMP -13.3 -23.3 -25.8 -28.6 -.023 .000 .016 .234 .302 .421 .220 205 20/00 (\*10) .393 1.300 -.014 -.012 -.039 .241 -.045 6.5 6.6 8.9 8.0 5.9 5.9 6.9 2.2 1.6 8.5 (M/S) > WIND DIR (DEG) 290. 322. 344. 350. 350. 343. 339. 334. -16. 345. 348. 9 355 850.0 836.2 684.9 797.5 146.0 720.0 700.0 631.6 0.909 581.1 554.2 (MB) 772.0 PRESS 802.8 142.3 713.3 628.5 605.0 RADIOSCNDE Ξ 158. 288. 1181. 1219. 1523. 1664. 1828. 2437. 2741. 3046. .609 662. .416 2473. 3350. 3655. 3959.

\* VIRTUAL POTENTIAL TEMPERATURE

DATE	TIME	PLACE
24/02/	77 22:00:0	O DPGWV
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	355.0	8.7
146.	356.0	9.6
204.	357.0	8.7
259.	12.0	10.3
314.	15.0	11.0
369.	8.0	10.1
424.	15.0	8.7
479.	6.0	10.3
533.	1.0	9.4
588.	2.0	11.2
643.	7.0	13.4
698.	15.0	5.8
753.	29.0	2.7
808.	25.0	3.1
863.	13.0	9.4
918.	11.0	12.1
972.	11.0	8.5
1027.	11.0	9.8
1082.	12.0	8.5
1137.	16.0	8.9

1.870 2.432 DIHVIDZ (\*1000) (DEG K) 286.8 283.8 284.0 284.4 284.7 284.8 285.5 236.6 285.9 288.5 288.7 290.3 286.1 283.8 289.8 288.1 #AHL GM/KG1 6. 50 DPGWV (DEG C) -12.6 -21.8 -24.1 -6.3 -17.2 -19.7 -34.3 -10.0 -9.2 1.6--16.4 -17.6 -25.5 -23.0 -29.8 -32.7 DEWPT TIME 00:00:00 LOCATION DEG C) 13.6 1-8-8 -18.3 -13.7 -14.8 -15.5 -20.7 -23.1 TEMP 4.9--32.0 -11.3 -16.0 -20.6 -22.1 -28.1 -.013 -.028 0000 .159 910. 0000 .013 .025 .193 .003 .013 -.043 .003 20/00 -.036 .000 (01\*) 9.5 9.0 0.6 10.1 11.0 12.7 11.4 0.3 18/w DATE 25/02/77 WIND DIR (DEG) 347. 330. 333. 345. 351. 348. 4 360. 15. 17. 348 685.3 631.6 606.0 521.0 850.0 834.9 776.0 742.3 556.9 533.9 845.5 803.1 691.0 867.7 0.649 616.5 500.0 (MB) FACIOSCNDE 3959. 1828. 2741. 1523. 2241. 3046. 2 164. 206. 878. 2437. 2617. 3350. 305. .609 1766. 3655. 1219. 0

1.888 2.718

2.248

4.317

090 --

1.345 .853

1.862

2.194 1.890 .050

.935

VIRTUAL POTENTIAL TEMPERATURE

1.744

1.989

C-12

DAT		TIM		PLACE
25/02	///	02:00	1:00	DPGWV
HGT.	WIND	DIR	WIND	SPEED
(M)	(D)	EG1	(1	4/5)
76.	35	1.0		7.8
146.	35	2.0		9.3
204.	35	2.0		10.3
259.	35	1.0		12.2
314.	35	0.0		13.1
369.	34	7.0		13.0
424.	34	6.0		14.3
479.	34	5.0		12.5
533.	34	5.0		10.0
588.	34	5.0		11.6
643.	34	4.0		10.5
698.	34	4.0		10.7
753.	34	5.0		13.4
808.	34	0.0		9.8
863.	35	1.0		7.2
918.	35	4.0		8.9
972.	34	5.0		7.6
1027.		3.0		2.2
1082.	13	4.0		3.6

RACIDSCNDE DATE 25/32/77 TIME 03:00:00 LOCATION DPSAV

7	PRESS	WIND OIR	ח	20/00	TEMP		۲. ۲.		DTHVIDZ
( ~ )	2	(OE 6)	(M/S)	( *10)	(DEG C)	(DEG C)	(SM/KG)	(DEG K)	(*1)00
0.	1 0	335.	5.0	000.				-	0
	58.							83.	.27
0	50.	340.	8.5	.207	2.			83.	5.6
197.	647.0				-3.0	-5.5	3.0	283.8	66
0	35.	355.	8.5	000.				83.	.74
0)	11:							33.	9
0	03.	350.	8.5	0000		6		84.	.46
0	73.					2.		85.	-
-	72.	4	7.3	039	8	12.		85.	3
-	42.	353.	6.7	020	-11.4	3.		85.	5.
0	26.				2.	13.		85.	-
2	13.	356.		010	3	14.		85.	3
-	00	359.	6.9	.034		16.		86.	2.
2	85.	-1	7.8	.058		17.		86.	8
0	.69				-	6	1.2	87.	.5
~	58.	5.	0	-092		-	1.1	87.	•
5	.64	*	12.7	.193	0	5	.7	85.	.6
3	32.	• •	2.	020		25.	8.	88.	0.
8	28.				0		.1	88.	6.
4	90	. 4	12.5	100.	23.	27.	9.	38.	
4	81.	357.	+	.056	5.	30.	.5	.68	
0	77.				2	30	• 5	89.	1.39
9	64.				1.	32.	4.	.06	6.
2	57.	353.	14.8	.020	-	5	• 3	90.	6.
5	50.				7	-	•3	.16	S
5	34.	354.	16.0	.039	.6	8	•3	.16	.2
2	12.	350.	-	145	2.	6	• 2	91.	0
-	03.				3.	0	.2	91.	7
2	.00	358	11.8	010	-22 0		,		•

DATE 25/02/		
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	356.0	6.6
146.	352.0	8.9
204.	360.0	9.3
259.	360.0	9.2
314.	353.0	10.4
369.	353.0	9.4
424.	352.0	8.1
479.	352.0	8.1
533.	353.0	9.4
588.	351.0	10.3
643.	349.0	11.2
698.	348.0	10.7
753.	348.0	8.9
808.	347.0	11.2
863.	347.0	12.1
918.	350.0	11.6
972.	350.0	10.7
1027.	350.0	12.1
1082.	349.0	13.9
1137.	349.0	13.4

1.793 2.021 6.019 2.089 1.944 2.366 2.092 2.060 3.364 2.609 .750 -1.621 1.521 .886 100.5 1.025 8.680 1.980 2.162 DTHV/DZ 2.347 (\*1999) 1.887 141. (DEG K) 285.2 285.2 285.8 286.3 283.0 284.0 284.6 288.6 283.1 286.9 28882 288.2 239.2 287.6 281.8 231.9 282.3 288.1 (GM/KG) 2.1 1.5 8. 004 2.0 1.9 1.4 DATE 25/02/77 TIME 06:00:00 LOCATION QPGWV -30.9 -12.0 -9.5 -10.5 -11.9 -16.2 -32.8 -40.8 COFG CI -11.2 -14.5 -17.7 -18.3 -41.0 -24.6 -26.1 -28.5 -14.8 DEWPT -37.1 (DEG C) TEMP -5.0 -4.4 -12.5 -14.9 -17.3 -19.2 -26.4 4.1-4.6--17.7 -21.6 -24.0 -25.9 -29.0 -31.5 -17.2 -16.1 .016 000 .020 .000 (01+) .293 .059 .347 .036 .016 190. .133 .141 .043 20/00 8.0 11.4 9.91 13.4 16.0 17.5 0.01 12.3 2.7 (W/S) MIND DIR (DEG) 337. 9 11. 16. 21. 18. 12. 340. 358. 23. 349. 743.7 687.2 557.4 869.8 850.0 804.8 179.0 714.5 658.6 836.7 773.8 740.2 0.007 581.7 534.2 PRESS ( MB) 807.5 686.3 676.2 632.0 4.909 586.5 RADIOSCNDE 181.305. 818. 2132. 2437. 2741. 3678. 131. 609 863. 255. 523. 938. 914. 219. 3046. 3550. 3655. 3959.

C-16

DAT 25/02		
HGT.	WIND DIR (DEG)	WIND SPEED
76. 146. 204. 259. 314. 369. 424. 479. 533. 588. 643. 698. 753. 808. 863. 918.	359.0 357.0 352.0 347.0 345.0 341.0 341.0 342.0 342.0 344.0 346.0 346.0 346.0	5.8 8.0 8.0 8.0 11.1 11.7 9.3 9.7 9.8 10.3 10.3 8.9 9.8 10.3
972. 1027. 1082. 1137. 1192. 1247.	344.0 344.0 343.0 346.0 344.0 341.0	9.8 8.9 9.4 10.7 10.3 8.9

3.390 3.042 2.625 2.790 5.115 1.420 3.578 5.233 3.424 3.295 2.181 3.242 .812 -8.486 3.379 1.622 DIHVIDZ (\*1000) (DEG K) 283.0 283.8 284.6 286.9 287.3 239.2 291.4 291.9 284.0 286.3 291.3 282.1 282.6 232.0 284.7 286.6 286.7 28882 THY MR (GM/KG) 00--04mm0@--0mm DATE 25/02/77 TIME 09:00:00 LOCATION DPGWV (DEG C) -15.9 -29.9 -12.8 -22.5 -23.2 -51.2 -14.4 -29.5 -34.4 -39.5 -44.5 9.64--50.4 -24.7 -26.1 TEMP (DEG C) -11.5 -15.5 -5.2 -13.2 -3.7 -14.4 -18.4 -24.4 -26.4 -.5 -2002--22.3 -26.7 -28.9 -31.3 (\*10) 610 --.036 -.008 .013 .036 .017 .046 0000 .072 .062 -.013 -.003 12.0 (M/S) 10.5 12.2 12.5 15.6 WIND DIR 337. 345. 347. 354. 2. 10. 17. 16. 14. 747.5 853.3 838.7 806.4 716.4 712.5 688.0 6.099 657.5 608.3 583.6 556.5 536.6 634.1 ( MB) 559.3 700.3 PADIOSCNDE 914. 2170. 3 199. 274. 305. 1523. .6691 2132. 2741. 3045. 609 1565. 1828. 3959. 3350. 3395. 4157.

\* VIRTUAL POTENTIAL TEMPERATURE

DATE	T	IME	PLACE
25/02/	77 11:0	00:00	DPGWV
HGT.	WIND D	IR WI	ND SPEED
(M)	( DEG	)	(M/S)
76.	325.0	)	6.5
146.	330.0	)	5.7
204.	336.0	)	5.4
259.	342.0	)	5.4
314.	344.0	)	5.4
369.	343.0	)	6.5
424.	344.0	)	7.2

RADIOSONDE DATE 25/02/77 TIME 12:00:00 LOCATION DPGWV

0	(MB)	(DEG)	(M/S)	(*10)	(DEG C)	(DEG C)	(GM/KG)	(DEG K)	(*1000)
		340.	6.1	000	2.8	-7.6	2.5	287.5	000
89.	862.0				2	-16.1	1.3	285.0	-28.09
196.					-1.5	-14.5	1.5	284.8	-2.161
201.		329.	10.5	.219	-1.6	-14.5	1.5	284.7	•
305.		338.	9.7	077	-2.5	-14.7	1.5	284.9	1.290
.609		337.	8.7	033	-5.4	-15.2	1.4	285.0	.295
914.		341.	8.2	910	-8.2	-15.8	1.4	285.1	.534
1008.					1.6-	-15.9	1.4	285.1	.032
1219.		346.	10.3	690.	-10.5	-19.4	1:1	285.8	3.269
1523.		351.	10.6	010.	-12.7	-24.4	.1	286.6	•
1705.		355.	9.6	066	-14.0	-27.4	9.	287.1	2.713
1828.		359.	8.6	065	-14.8	-29.4	• 5	287.5	3.425
2057.					-16.4	-33.2	.3	288.2	
2132.		3.	8.9	.010	-17.0		• 3	288.3	2.
2437.		7.	10.3	•046	-19.2	-36.9	.2	289.2	6.
2741.		8	12.1	.059	-21.4	-40.0	•2	290.1	.8
3046.		8.	12.7	.020	-23.6	-43.0	-:	291.0	8
3238.						6.44-	1.	291.5	2.717
3350.		7.	13.2	•016	-26.0	-45.5	1.	291.6	.2
3655.		2.	13.5	010.		-47.2	-:	292.2	1.976
3959.		353.	15.1	.053	-31.0	-48.9	1.	292.8	
4167.		351.	16.5	190.	-32.8	-50.0	1.	293.1	1.235

\* VIRTUAL POTENTIAL TEMPERATURE

DAT 25/02		
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76.	346.0	5.6
146.	348.0	4.5
204.	358.0	4.9
259.	357.0	5.4
314.	357.0	6.3
369. 424.	359.0	7.2
479.	2.0 357.0	6.0 5.7
533.	350.0	6.3
588.	349.0	6.9
643.	349.0	8.0
698.	347.0	9.4
753.	345.0	9.8
808.	345.0	11.6
863.	344.0	12.9
918.	342.0	10.0
972.	338.0	7.3
1027.	338.0	5.8
1082.	334.0	4.7
1137.	334.0	5.2
1192.	328.0	4.5
1247.	331.0	4.1
1302.	341.0	5.3
1356.	341.0	5.4
1411.	341.0	5.4
1521.	346.0 349.0	5.8
1576.	349.0	5.8
1631.	349.0	6.7
1686.	349.0	7.2
1741.	349.0	7.2
1796.	349.0	6.7

RADIOSONDE DATE 25/02/77 TIME 15:00:00 LOCATION DPGWV

7	PRESS	WIND DIR	-	20/00	TEM	DEWPT	K.	I	DTHV/DZ
E	M 8	(DEG)	(M/S)	(*10)	(DEG C)	(DEG C)	(GM/KG)	(DEG K)	(*1000)
	871.6	345.	7.3	000.	3.2		2.0	87.	000
0		344.	7.5	010.	4.			8	-
0					6	-17.6	1.1	86.	00
0		360.	6.8	068	6	-17.6	1.1	00	
4						-17.1	1.2	86.	13
0		354.	7.9	.036	3.	•	1.3	86.	.02
9						-16.4	1.3	86.	75
-		346.	9.3	940.	-6.8		1.3	86.	~
-		340.	11.3	990.		-17.6	1.3	8	5
523.		337.	12.0	.023			1.3	86.	52
8					•		1.3	86.	N
-		336.	11.7	016	4	-18.5	1.3	86.	.87
2		337.	11.0	062	-16.2		1.3	86.	.87
9						8	1.3	85.	.22
-					-17.6	.9		87.	14.
3		343.	6.6	049	-17.0		• 3	88.	1.6
3					16.	3.	•3	88.	.42
3		350.	10.3	.026	-19.2		• 3	89.	.39
4					19.	5	.3	.68	.02
4		345.	10.9	.020	-21.2	.9	•3	90.	.60
35.						-36.7	•3	290.6	3.706
*		341.	12.1	.039	23.	8	•2	.06	.55
3		343.	12.3	.007	. 9	9.04-	• 5	.16	14.
0					8.	-42.3	.2	0	.55
2		348.	13.3	.033	8		.2	92.	.13
4					-29.4	-42.7	•2	93.	.02
2		356.	16.3	660.	29.		.2	. 46	.65
-					6		.2	6	.26
8		360.	17.5	*50*	-30.2	-43.2	.2	0	

\* VIRTUAL POTENTIAL TEMPERATURE

RADIG	RADIOSONDE	DATE 28/02/77		TIME 08:0	08:00:00 LOCATION	TION DPGWV	××		
7	PRESS	WIND DIR	0 7	20/00	TEMP	DEWPT	MR	THV*	DTHV/DZ
E	5 1	10501	(C/E)	107.1	2	2	104/401		10001+1
.0	73.	•06	2.1	000	-2.9	-	2.5	281.3	.00
39.	.69				2	0	•		-
220.	50.	183.	8.3	.282	6.				.40
305.	41.	172.		000	1.4				16.383
331.	38.				1.5	•			.2
.609	.60	184.	6.7	053	9.	-13.5			
914.	779.5	196.	4.9	059	5		1.5	3.	9+4-9
968.	74.				1	-15.7	1.4		.32
21	50.	226.	4.1	026	-2.6		1.4		2.385
52	21.	257.	5.5	•036	-5.0		1.3		.97
67	07.				-6.3	-18.5	1.2		.36
1764.	00	269.	4.9	.050	-6.5	-	1.0		.81
82	.46	271.	6.5	•010		-22.8	6.		.93
88	89.				8.9-		8.		8.437
13	67.	278.		.026	-8.9	-24.1	8.		1.566
43	41.	280.	8.0	.023		-23.7	6.		0
11	19.				-14.0	-23.3	6.		-
74	16.	279.	8.7	.023	-13.8	-31.1	• 5		16.395
86	.90				-12.8		•		6.
04	92.	276.	8.8	.003		-64.3	0.		.5
35	69	270.	9.5	.013			••		.3
49	58.					-62.1	•		
65	46.	267.		•026	•		•		.76
95	24.	271.	11.2	•039	6	4	٦.		
4263.	03.	281.		•029	-21.9	-33.6	4.		.83
31	00	281.	•	1115	2.		5.		2.698

DATE	TIME	PLACE DPGWV
28/02//	7 09:00:00	DPGWV
HGT.	WIND DIR	IND SPEED
(M)	(DEG)	(M/S)
76.	145.0	15.0
146.	148.0	11.7
204.	153.0	10.0
259.	156.0	6.5
314.	164.)	5.4
369.	170.0	5.5
424:	172.0	5.1
479.	176.0	5.4
53 <b>3.</b>	186.0	6.6
588.	186.0	8.0
643.	182.0	7.2
698.	183.0	6.3
753.	182.0	5.8
808.	182.0	4.7
863.	183.0	3.6
918.	184.0	3.3
972.	188.0	3.3
1027.	204.0	3.6
1092.	217.0	3.6
1137.	226.0	4.5
1192.	226.0	6.3
1247.	231.0	6.3 5.5
1302.	234.0	5.3
1356.	241.0	5.4
1466.	249.0	5.4
1521.	249.0	5.4
1576.	249.0	5.7
1631.	251.0	5.8
1686.	251.0	5.9
1741.	256.0	6.3
1796.	265.0	6.4
1851.	270.0	6.7
1905.	280.0	6.5
1960.	279.0	7.2
2015.	272.0	8.0

				1	-				
~ 5	CMB)	WIND DIR	(8/8)	(410)	(DEG C)	(DEG C)	(GM/KG)	(DEG K)	(*1000)
	-					1			
•	11:	140.	7.7	0000	7.7		2.4		8
118.	59.				4.9		2.2		15.250
204.	50.	170.	8.8	.054	4.1	-10.3	2.0	290.8	.213
305.	39.	159.	8.9	.010		-	1.9		6890
529.	16.				1:1	-13.4	1.7		.210
.609	808.4	173.	9.8	.030	1.3		1.7	292.0	13.050
719.	97.					3	1.7		3
.416	78.	177.	8.9	030	.5		1.6		;
065.	63.				4	-15.5	1.5		3.98
1219.	.64	187.	0.9	095	-1.6	-16.0	1.5	295.2	2.162
523.	20.	200.	6.3	010.		-17.0	1.4		2.116
752.	700.0	208.		+000	-5.7		1.3		2.492
828	93.	211.	6.3	013	-6.3		1.3		1.946
132.	.99	237.		100.	-8.7	-19.0	1.3		1.984
165.	64.				-8.9		1.3		3.60
437.	41.	256.	8.4	.062	-11.0		1.1		2.225
.965	28.				•	-22.5	1.0		1.646
.141.	16.	260.	10.8	.079	-11.5		••		16.888
781.	13.				-11.2	-32.5	4.		19.456
046.	91.	258.	12.0	.039	•		••		.84
1350.	68.	258.	12.4	.013	-15.9	0	••	302.4	1.851
643.	47.						9.		
655.	46.	254.	13.1	.023			9.		.493
.656	24.	251.	13.9	.026		+	*.		0
4263.	03.	250.	15.0	.036	-22.8	-38.8	•3	304.8	2.918
307.	00	250.	14.9	023			.2		.704

DAT 28/02	E TIM /77 12:00	PLACE
HGT.	WIND DIR	WIND SPEED
(4)	(DEG)	(M/S)
76.	153.0	6.3
146.	170.0	2.6
204.	163.0	3.8
259.	172.0	4.2
314.	185.0	4.7
369.	187.0	5.4
424.	180.0	6.5
479.	176.0	6.8
533.	180.0	6.7 7.2
588.	176.0	
643.	178.0 182.0	7.3
753.	189.0	7.2
808.	193.0	7.0
863.	195.0	6.0
918.	197.0	5.7
972.	200.0	5.5
1027.	208.0	7.0
1082.	216.0	6.3
1137.	220.0	5.8
1192.	226.0	4.9
1247.	225.0	4.5
1302.	223.0	4.6
1356.	223.0	4.5
1411.	219.0	5.4
1466.	225.0	4.5
1521.	241.0	3.4
1576.	241.0	4.5
1631.	245.0	5.2
1686.	250.0	5.4
1741.	243.0	6.3
1796.	249.0	6.3
1851.	261.0	6.3
1905.	253.0	7.6
1960.	253.0	8.0
2015.	255.0	7.2

2.569 4.690 2.116 12.480 4.839 1.822 1.862 1.187 1.022 1.141 .616 3.188 2.466 4.872 3.289 4.308 .493 -.351 . 395 2.572 .053 4.666 DTHV/DZ (\*1000) 4.032 (DEG K) 293.9 297.5 297.9 298.0 298.2 298.4 298.8 299.1 299.1 293.8 293.8 293.8 294.9 296.1 296.6 300.4 300.6 301.8 299.7 295.3 293.8 303.1 303.6 297.1 (GM/KG) 2.1 2.0 2.0 1.8 1.8 9.1 24.4 4.1 45.7.7. 9.50 2.7 2.1 0.1 : DATE 28/02/77 TIME 14:00:00 LOCATION DPGWV (DEG C) 6.6--11.0 -17.9 -17.9 DEWPT -10.3 -10.9 -13.0 -13.6 -14.6 -15.3 -16.0 -17.8 -16.5 -18.3 -20.8 -25.1 -101--18.2 -16.7 -17.1 -19.4 -23.8 -16.7 (DEG C) -7.8 -15.6 -17.8 10.0 8.0 6.9 2.1 3.0 9. -.5 -1.0 4.4--5.5 -6.3 -17.5 -: 1-2-7 TEMP --10.5 -13.2 -14.3 -19.7 -21.6 -22.4 -23.7 -.020 -.013 -.019 000. .085 .016 .020 690. 000 .000 (01\*) .089 .030 .052 .112 -.016 -.023 20/00 .131 -.011 5.0 19.0 5.0 16.9 7.6 7.9 (S/W) 4.1 6.6 12.9 19.0 > WIND DIR (DEG) 155. 221. 183. 166. 185. 205. 216. 245. 248. 260. 260. 230. 251. 251. 249. 757.8 119.0 850.0 808.8 806.0 176.1 700.0 8.619 PRESS (84) 8.198 836.7 767.3 639.5 614.8 605.3 9.069 571.3 567.2 555.3 544.5 522.6 8.169 738.3 665.3 RADIOSONDE 2132. 2437. 2861. 3046. 3509. 176. 582. .609 914. .900 106. 219. 314. 523. 828. 1966. 3655. 3959. 4092. 2741. 3350. 4263.

C-27

DATE	TIME	PLACE
28/02/7	7 15:00:0	O DPGWV
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(4/5)
76.	150.0	-7.4
146.	143.0	5.7
204.	148.3	4.6
259.	155.0	4.1
314.	158.0	3.7
369.	156.0	4.0
424.	150.0	4.)
479.	165.0	3.7
533.	175.0	4.)
588.	185.0	5.2
643.	189.0	6.3
698.	194.0	7.2
753.	199.0	7.6
808.	206.0	6.7
863.	215.0	5.5
918.	215.0	6.3
972.	215.0	6.5
1027.	230.0	5.4
1082.	249.0	4.5
1137.	251.0	4.5

.348 1.176 2.328 3.003 1.608 1.442 1.390 1.273 2.807 1.987 1.951 2.144 1.472 (\*1000) 2.580 (DEG K) 274.3 297.2 297.8 298.1 298.2 298.4 298.7 296.4 296.5 296.6 296.6 299.5 300.1 302.0 (GM/KG) 4407074 1.3 1.3 1.3 4.1 4.70 4.1 4 4 4 DPGWV -13.0 -15.5 -15.8 -16.9 -21.6 -19.2 -18.3 -18.1 -18.3 -18.3 -24.0 -18.2 -18.0 -19.8 DATE 28/02/77 TIME 17:00:00 LOCATION (DEG C) -10.5 -6.5 -7.9 -10.5 7.7 -2.7 -5.3 -13.1 -16.2 -20.4 1.7 -15.7 -18.1 (\*10) -.046 -.030 .179 .053 .036 -.036 0000 -.024 .059 .069 .085 .007 20/110 -.010 -.022 6.7 9.1 10.0 10.0 10.0 9.3 13.3 7.6 9.3 14.0 MIND DIR 162. 152. 167. 217. 250. 222. 222. 190 209. 232. 259. 850.0 832.4 802.0 168.8 743.9 716.1 714.8 700.0 6889 676.8 662.4 636.7 61119 582.8 541.8 772.7 588.1 564.6 (MB) 864.0 PRESS RADIOSONDE 1219. 1523. 1538. 1828. 1968. 2132. 2437. 2741. 3350. 7 8 134. 609 .416 956 1115. 3959. 3655.

.430

7	PRESS	WIND DIR	>	20/00	TEMP	DEMPT	a ¥	THV	DTHV/DZ
3	2	(050)	(M/S)	(*10)	(DEG C)	(056 C)	(GM/KG)	(DEG K)	(*1000)
9	:	100	7.7	000	5.0	-8.8	2.3	290.7	000
19.	6				7.7	6.6-	2.1	293.7	157.895
1111.	850.0	177.	12.2	.405	9.8	-11.1	1.9	295.5	20.091
130.	8				8.8	-11.4	1.9	595.9	21.137
305.	0	169.	12.9	.036	8.3	-13.8	1.6	297.1	6.904
343.	5				8.1	-14.4	1.5	297.4	5.418
.609		179.	14.8	-062	6.2	-12.8	1.8	298.1	2.179
653.	5				6.5	-12.5	1.8	298.2	3.385
.416		186.	13.9	030	3.4	-13.8	1.7	298.3	.227
21	-				• 5	-15.3	1.6	298.4	.226
1523.	;	189.	13.8	002	-2.4	-16.7	1.4	298.4	.111
68	0	193.	13.9	9000	-3.9	-17.5	1.4	298.4	.200
72	.9				-4.3	-17.7	1.4	298.4	.134
82	7.	199.	14.2	.021	-5.2	-18.8	1.3	298.5	.887
13	-	206.	14.2	0000	-7.7	-21.8	1.0	299.0	1.605
32	*				-9.3	-23.8	6.	299.3	1.487
43	3	212.	11.9	075	-10.2		6.	299.5	2.052
2741.	0	222.	10.6	043	-12.7	-22.6	1.0	300.1	1.876
90	0				-14.8		1:1	3000	1.952
04	.9	226.	10.2	013	-15.2		1:1	3000	.878
35	3.	227.	11.2	.033	-17.9		6.	300.9	666.
42	7.				-18.6	-25.5	6.	301.0	.520
52	0				-18.6	-31.1	••	302.0	10.91
65		237.	11.5	010.		-33.5	4.	302.1	.905
95	6	241.	12.3	.026	2.	-38.9	.2	302.4	1.001
23	0	238.	12.8	AIC.	-24.9	-43.8	.,	302.7	LAG

DATE	TIME	PLACE
28/02/7	77 21:00:	DO DPGWV
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	172.0	9.4
146.	176.0	10.8
204.	192.0	9.6
259.	191.0	10.6
314.	190.0	12.9
369.	192.0	12.4
424.	191.0	11.6
479.	198.0	13.0
533.	198.0	13.0
588.	198.0	14.3
643.	204.0	16.5
698.	204.0	19.9
753.	202.0	23.0
808.	195.0	19.0
863.	198.0	14.0
918.	208.0	13.9
972.	191.0	13.4
1027.	203.0	13.4
1082.	211.0	13.4
1137.	197.0	13.4

.229 -.603 1.536 3.054 4.007 67.313 6.710 2.862 3.443 2.480 .108 690. 3.117 .635 .516 .258 .462 DTHV/DZ .217 (\*1000) (DEG K) 294.3 296.4 296.4 297.0 297.1 297.9 299.8 299.3 299.9 300.1 300.2 300.4 301.1 294.2 301.3 THV\* (GM/KG) ---DATE 29/02/77 TIME 23:00:00 LOCATION DPGWV (DEG C) -16.8 -19.6 -23.8 -33.6 -15.6 -17.6 -22.2 -13.9 -16.5 -18.5 -20.5 -21.8 -22.9 -24.7 -24.8 -28.4 -32.6 -15.1 (DEG C) -13.0 -17.9 -18.5 7.5 6.8 9.9 4.5 1.6 8.6--4.2 -4.5 -7.0 -20.7 3.7 2.1 -2.2 -3.1 -15.3 -.039 -.056 -.051 (01\*) .089 910. .030 .036 -.003 .000 .593 .023 .053 20/fid .052 9.3 8.5 10.5 3.1 8.5 11.7 12.2 12.9 14.5 15.5 (M/S) 4.6 WIND DIR (DEG) 211. 198. 205. 210. 216. 234. 239. 237. 213. 232. 231. 850.0 790.3 6.161 139.8 712.2 700.0 685.3 681.8 633.5 805.8 (MB) 828.2 768.5 762.8 562.0 556.8 539.3 1.609 585.1 RADIOSONDE 819.8 95. 2784. 3 974. 219. 523. 572. 1868. 2437. 305. 688 .416 828 3350. 3420. 3655. 609 660.

\* VIRTUAL POTENTIAL TEMPERATURE

DATE 01/03/	TIM 77 00:00	
		WIND SOCIO
HGT.	WIND DIR (DEG)	WIND SPEED
76.	320.0	4.2
146.	273.0	5.0
204.	254.0	7.0
259.	256.0	8.2
314.	258.0	7.8
369.	257.0	7.2
424.	254.0	7.9
479.	253.0	7.3
533.	255.0	7.0
588.	255.0	7.0
643.	256.0	6.9
698.	258.0	6.9
753.	258.0	6.2
808.	261.0	6.0
863.	262.0	5.9
918.	257.0	6.2
972.	253.0	6.8
1027.	250.0	6.1
1082.	249.0	6.0
1137.	247.0	5.8
1192.	243.0	5.5
1247.	243.0	6.0
1302.	243.0	6.2
1356.	242.0	6.1
1411.	245.0	7.0
1466.	249.0	9.2
1521.	251.0	9.0
1576.	249.0	8.0
1631.	248.0	7.0

4.205 1.579 15.936 7.114 6.839 8.848 4.307 2.327 5.965 5.845 5.833 .553 .238 2.144 1.727 .749 .970 3.161 1.817 5.017 4.931 116. .045 .232 (\*1000) (DEG K) 295.5 292.1 294.0 294.4 296.6 297.9 293.9 294.0 296.7 588.9 286.9 288.6 290.7 298.7 288.4 292.0 298.5 299.2 290.4 299.4 THV\* (GM/KG) 1.6 1.5 2.9 2.2 1.8 1.6 2.5 1.6 1.7 1.7 1.5 1.5 1.0 2.7 1.3 DATE 01/03/77 TIME 02:00:00 LOCATION DPGWV (DEG C) -7.2 -7.3 -7.2 -7.2 -10.5 -17.2 -24.6 -21.1 -16.9 -17.2 -16.9 -16.9 -11.2 -14.3 -15.7 -16.4 -18.4 -28.0 DEWPT -16.1 -19.1 (DEG C) TEMP 6.6 4.--2.9 -3.3 -7.9 4.6--13.2 -25.9 -26.9 -4.3 -4.5 -6.8 -8.1 1.--11.8 -14.2 -16.4 -16.9 -18.2 -18.9 -20.5 -23.2 -1.1 (01+) .913 .039 .005 20/00 0000 .030 .079 .095 .079 .089 000 -- 134 000 160. .072 .062 11.0 14.5 3.9 3.9 8.6 19.0 M/SI 4.2 13.6 5.1 16.3 15.1 WIND DIR 319. 300. 313. 320. 310. 278. 256. 237. 225. 221. 216. 211. 210. 206. PRESS (MB) 861.0 850.0 767.9 697.3 505.8 858.9 8528 804.8 9.161 738.9 656.8 572.3 536.0 7.017 700.0 631.2 558.7 RADIOSONDE 762.8 734.3 641.3 6.06.3 601.4 683.4 582.2 914. 2317. 2437. 2741. 3046. 642. 672. 3350. 335. 541. 219. 268. 523. 132. 3655. 305. 609 2803.

1.869 1.923 3.866 3.100 3.729 1.835 491.4 5.920 3.882 7.895 3.449 810.9 3.996 8.306 2.117 2.016 (\*1000) (DEG K) 287.2 290.2 290.2 293.9 292.1 292.3 284.7 286.3 286.6 294.4 296.5 297.0 295. 295. (GM/KG) 1.0 DPGWV (DEG C) -7.8 DEWPT -6.8 -26.5 -23.9 -11--21. -5. -5. -10. -111--14. -18. -16. DATE 01/03/77 TIME 05:00:00 LOCATION 10EG C1 -22.6 -3.1 -111.1 -11.6 -13.6 -15.6 TEMP -2.9 6.4--5.3 -6.5 4.1--10.1 -10.8 -200--27.7 -9.2 -16.6 -17.8 -26.1 .016 .010 (01 +) .036 -.201 660. .125 680 000. 190. 000 .062 .102 690 .--.216 -.034 ZO/Fig ---11.0 12.6 10.3 4.6 18.5 M/SI 13.4 1.91 WIND DIR 335. 347. 54. 341. 331. 325. 319. 171. 162. 207. 174. 194. 213. 861.3 853.8 850.0 PPESS (MB) 828.8 802.8 766.9 737.4 723.4 708.9 700.0 681.3 615.8 533.5 781.8 579.4 658.9 556.4 654.6 PADIOSONDE 2 914. 219. 367. 620. 756. 828. 2132. 2437. 2741. 3655. 105. 523. 3046. 3350. 305. 556. .609 764. 2596.

RADIDSONDE DATE 01/03/77 TIME 08:00:00 LOCATION DPGWV

~ E	(MB)	(DEG)	(M/S)	(410)	(DEG C)	(DEG C)	(GM/KG)	(DEG K)	(*1000)
0.	1:	283.	4.2	000	1 .	-5.5	2.9		000
77.	2				3	-4.8		282.7	-4.354
.03.	0	323.	8.8	144.	3		3.1		2.225
.65.	843.3				4.4-	-5.0	3.1	282.7	
.50	8.	331.	8.6	010	•	5	3.0		3.334
.609	.9	-	6.6	.043	•	-	2.7	284.3	
114.	.9	312.	9.1	026	6	6	2.4	285.3	
182.	6				•	-10.8	2.2	285.8	3.198
219.	.9	313.	8.7	013	-11.1	-11.8	2.1	286.4	4.233
523.	7	315.	4.6	.023	-13.1	-14.1	1.8	287.4	3.411
.500		315.	9.6	0000	-13.6	-14.7	1.7	287.7	3.793
128.	6	317.	9.2	009	-15.0	-16.4		288.6	3.687
.06	9					-18.3	1.4	289.5	3.446
32.	3.	315.	7.1	690 -		8		289.6	2.955
37.	.9	305.	4.2	095		-20.7		290.8	3.955
41.	-	250.	1.6	086		-22.8			3.540
116.	5				-		1.0	292.1	3.351
.940	-	184.	3.9	.075	2.	+	6.		4.277
.21.	3				-23.9	-25.1	6.	293.8	4.003
150.	3.	192.	7.9	.132	*	•	∞.		.775
.55.	-	199.	11.4	1115	.9		9.	0	
.15.	2.				-	-30.7	9.	295.7	3.567
.65	6	199.	13.2	.059	-29.3		5.	0	
.180	0	199.	13.8	140.	-30.4	4.	4.	0	1.269

3.115 2.739 2.005 3.511 1.386 .563 .818 3.067 3.234 1.715 2.848 2.181 3.802 5.084 9.605 2.776 3.543 3.360 3.731 -166.667 0.000 DTHV/DZ (\*1000) (DEG K) 283.6 287.5 293.8 284.0 284.5 286.8 287.0 288.6 291.2 284.7 284.8 285.2 285.9 286.3 289.6 285.1 289.7 8.162 292.8 293.8 290.7 (GM/KG) 1.3 2.0 1.5 2.8 5.4 5.4 2.1 1.6 1.2 1.0 8 9. DPGWV (DEG C) -32.6 -10.4 -6.2 -8.5 -8.5 -26.9 -33.0 -21.9 -24.6 -30.9 -111-1 -12.5 -14.3 -14.6 -16.0 -17.6 -18.0 -19.2 -24.4 -29.0 -38.0 DEWPT -19.1 -28.1 -16.7 CATE 01/03/77 TIME 11:00:00 LOCATION TEMP (DEG C) -2.0 -24.0 -2.4 -2.4 -4.0 9.4-9.9--9.3 -19.7 -17.9 -11.5 -12.3 -13.6 -14.2 -15.8 -15.9 -19.9 -22.0 -23.0 -27.8 -26.1 (\*10) 0000 .089 990. -.033 .177 -.019 .003 -.046 -.044 -.072 .036 102 .062 600 -.038 -.072 0.6 11.0 10.9 9.5 8.2 0.9 3.8 2.8 3.9 (8/W) 3.6 12.5 7.0 WIND DIR (DEG) 345. 314. 314. 322. 327. 327. 312. 327. 325. 311. 265. 213. 193. 194. 192. 192. 850.0 827.8 4.619 160.8 700.0 532.8 530.0 850.3 796.2 765.7 724.8 707.2 507.9 (MB) 736.0 PRESS 860.3 859.3 818.8 8.619 652.3 628.3 626.3 601.0 588.8 576.5 552.8 500.0 RADIOSONDE 3 .609 219. 337. 523. 2741. 6 305. 391. 914. . 496 601. 824. 828. 2132. 2892. 3046. 2437. 3618. 2413. 3350. 3655.

DATE 01/03/77	TIME 12:00:0	
HGT. W	IND DIR (DEG)	WIND SPEED
76.	50.0	2.0
146.	23.0	1.3
204.	313.0	1.6
259.	301.0	3.0
314.	302.0	3.9
369. 424.	306.0 306.0	4.8 5.2
479.	302.0	5.0
533.	306.0	7.0
588.	306.0	7.9
643.	303.0	8.0
698.	301.0	8.1
753.	300.0	8.3
808.	300.0	8.2
863.	304.0	8.0
918.	308.0	8.8
972.	309.0	7.9
1027.	313.0	7.0
1082.	319.0	7.0
1137.	322.0	6.8
1192.	328.0	6.7
1302.	336.0 339.0	6.2
1356.	342.0	5.5
1411.	340.0	5.0
1466.	335.0	4.8
1521.	329.0	4.2
1576.	324.0	4.0
1631.	318.0	3.7
1686.	310.0	4.0
1741.	309.0	4.0
1796.	298.0	3.3
1851.	300.0	3.9
1905.	304.0	4.0
1960.	295.0	3.8
2015.	286.0	4.0

-2.988 (\*1000) (DEG K) 285.4 285.8 287.0 287.6 287.8 289.2 289.7 285.3 287.6 288.7 291.7 287.7 290.7 292.4 285.7 285.3 285.8 286.7 287.7 289.6 291.1 (GM/KG) 1.6 2.6 2.3 1.4 1.4 1.3 1:1 1.0 1.1 6. 0.00 OPGWV (DEG C) -9.8 -9.8 -12.3 -12.9 -16.4 -18.1 -24.3 -32.9 6.9--7.1 -8.6 -15.2 -17.7 -20.7 -35.3 -37.7 -17.2 -22.0 -23.0 -31.3 DEWPT DATE 01/03/77 TIME 14:00:00 LOCATION (DEG C) 1.9 -14.9 -22.0 TEMP -1.2 -4.5 -5.0 -5.0 8.9--9.3 8.6--12.1 -13.6 -14.5 -17.3 -19.5 -25.1 -29.2 -6.1 -26.7 -21.4 010. .059 0000 .162 .010 .039 .036 .000 .079 .037 032 20/00 (01\*) -.026 -.052 3.0 5.8 2.0 6.5 7.5 7.3 5.7 8.1 8.8 11.2 (N/S) WIND DIR (DEG) 312. 321. 309. 319. 321. 293. 310. 343. 332. 247. 227. 217. .9 850.0 626.9 607.9 574.8 868.6 836.0 144.0 700.0 804.4 804.3 783.3 614.3 535.7 137.3 687.1 633.5 PRESS (MB) 855.8 813.8 73.7 715.1 691.3 657.3 559.1 RADIOSCNDE 173. 305. 518. 1686. 1826. 2437. 2741. 3152. 3350. î .609 914. 1523. 2162. 2665. 3655. 611. 818. 289. 3959. 4148.

4.476

5.102

4.208

.287

--193

164.

1.546 2.739 -1114

2.572

1.956

3.256

1.584

2.723

1.077

.234

.531

2.353

2.411 2.078 .898

C-39

CATE	TIME	PLACE
01/03/	77 15:00:0	O DPGWV
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	23.0	5.2
146.	19.0	4.0
204.	13.0	3.9
259.	4.0	4.0
314.	353.0	4.0
369.	346.0	3.8
424.	340.0	2.8

DTHV/DZ (\*1000) (DEG K) 284.8 286.2 287.0 287.7 288.0 288.3 288.5 289.2 290.9 291.9 292.8 284.5 290.1 293.3 283.9 284.2 (GM/KG) 22.59 1.6 1:1 3.2 DPGWV (DEG C) -25.5 -27.9 -21.3 -5.4 -11.2 -12.7 -14.2 -15.7 -18.8 -21.2 -23.4 -34.1 -4.5 -5.1 -5.7 -6.8 0.6--13.6 -16.4 DEWPT DATE 01/03/77 TIME 17:00:00 LOCATION (DEG C) -19.7 -24.0 -3.3 -8.6 -17.5 -26.2 -31.7 -1.8 -5.4 -6.5 -12.1 TEMP -12.9 -13.4 -14.5 -19.8 -21.9 -15.2 -.072 .056 -.026 -.010 000-.033 .075 .013 (01+) .175 -.013 20/00 -.044 -.042 -.007 0.01 5.6 8.8 7.8 9.5 11.5 12.0 11.0 10.2 1.0 7.6 9.8 10.5 10.5 (W/S) > WIND DIR (DEG) 330. 350. 317. 325. 322. 322. 320. 317. 310. 308. 304. 316. 314. 309. 850.0 500.0 (MB) 826.2 810.8 9.461 164.0 134.6 10901 0.00 686.8 4.159 624.3 1.009 575.7 552.2 PRESS 714.8 678.3 625.5 RADIOSCNDE 176. 2132. 33046. 3 . 80. 1430. 135. 453. .609 914. 219. 590. 2451. 2741. 1959. 3350.

2.874 3.195

2.911

2.366

2.811

.983

THE REPORT OF THE PARTY OF THE

2.203 2.502 2.351

1.115

3.106 2.896

2.694

3.122 1.388

.917

3.247

\* VIRTUAL POTENTIAL TEMPERATURE

DAT 01/03	E TIM /77 18:00	
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76.	319.0	5.1
146.	318.0 315.0	6.2
204.	313.0	6.2
314.	316.0	7.1
369.	320.0	7.8
424.	320.0	7.5
479.	316.0	6.5
533.	316.0	5.5
588.	319.0	5.6
. 643.	319.0	5.7
698.	321.0	5.1
753.	329.0	4.9
808.	330.0	4.6
863.	330.0	4.8
918.	331.0	5.8
972.	335.0	7.0
1027.	339.0	7.5
1082.	341.0	8.0
1137.	342.0	8.0

1.773 3.762 1.887 6.214 4.565 1.073 2.101 1.863 40.403 7.087 DTHV/DZ (\*1000) 4.141 (DEG K) 283.9 284.6 284.6 285.5 285.5 287.4 288.6 286.7 286.3 288.0 284.3 284.5 (GM/KG) 22.8 2.5 1.2 DPGWV (DEG C) -10.0 -14.8 -19.5 -6.2 -7.6 -12.4 -17.1 -22.2 4.9-4.9--7.2 -101-DEWPT DATE 01/03/77 TIME 20:00:00 LOCATION (DEG C) -13.9 -16.2 -2.0 -5.1 -11.5 -18.6 -21.2 TEMP -2.5 -2.2 -2.3 -4.1 0.6-1.6--14.9 -21.0 -.072 .013 .072 20/00 0000 .004 (01+) -.013 -.059 -.064 -.013 3.6 6.6 11.8 8.5 8.1 8.5 13.4 13.6 (N/S) 11.2 > WIND DIR (DEG) 315. 307. 314. 322. 332. 336. 342. 347. 334. 332. 343. 850.0 815.8 766.3 706.1 859.1 857.3 847.3 826.7 678.4 623.8 (MB) 764.7 134.8 625.3 PRESS 583.8 4.159 RADIOSCNDE E 305. 1523. 2437. 85. 914. 2132. 17. 110. 2741. 2941. 0 409. 609 898. 1828. 1863. 2455

.452

\* VIRTUAL POTENTIAL TEMPERATURE

A

3.056 3.582 3.415 3.717 .693 \$ 035 .457 1.597 .307 2.778 3.447 .885 .588 069. .335 .670 (\*1700) (DEG K) 286.4 286.5 286.9 283.5 285.5 286.9 287.8 288.7 290.0 290.6 289.5 291.5 284.5 288.1 291.1 291.7 292.0 THV\* (GM/KG) 3.2 2.5 2.1 1.8 1.8 1.6 1:3 DATE 01/03/77 TIME 23:00:00 LOCATION DPGWV -8.9 -9.2 -11.4 -29.6 -21.4 -26.8 -3.3 -3.6 -5.1 -18.7 -13.9 DEWPT -14.4 -16.2 6.91--32.5 -24.1 -10.5 -12.9 -15.0 -17.3 TEMP -2.0 -2.6 -2.9 -4.3 -6.3 -8.0 -8.3 -27.3 -10.8 -24.7 -22.2 -25.2 -30.1 .016 -.049 040.-.115 .000 0000 940. -.003 .008 -.066 20/00 (01\*) 155. -.013 -.003 14.5 9.8 14.2 15.7 0.91 9.0 4 66 4 10.7 (W/S) > WIND DIR (DEG) 297. 308. 319. 334. 300. 339. 342. 344. 346. 359. 354. 347. 340. 825.9 794.5 764.2 737.8 734.7 651.2 599.8 528.7 678.3 575.6 705.9 551.8 767.8 700.0 (MB) RADIOSCNDE 305. 878. 914. 1186. 1219. 1523. 828. 2132. 2741. 3046. 3350. 3655. 3108. 3959.

.

C-44

2.629 3.115 3.795 2.564 2.559 2.973 3.579 3.433 2.932 3.662 3.594 3.420 1.617 3.014 3.343 .700 1.810 1.719 DTHV/DZ -.104 .166 (\*1000) (DEG K) 291.6 284.1 284.9 285.1 286.3 286.9 287.9 288.8 289.9 290.4 290.9 1.162 292.1 283.3 283.4 285.9 291.4 288.1 289.7 4.162 THV\* (GM/KG) 6 8 9 2.4 1.9 1.8 1.6 1.4 1.2 2.1 DATE 02/03/77 TIME 02:00:00 LOCATION DPGWV (DEG CI -3.3 -26.5 -5.3 -13.7 -17.9 1.4--7.3 -9.5 -17.7 -29.8 DEWPT -10.4 -11.6 -14.1 -15.8 -20.6 -23.3 -24.3 CDEG CI -2.8 8.6--12.9 -15.0 -17.0 -24.6 -3.5 -8.9 1-9-1-4-7 -10.9 -22.0 1.9--13.3 -16.8 -19.5 -23.0 -.010 -.168 (01+) 0000 .776 -092 .108 .000 .053 ZO/NO -.066 -.052 -.150 -.026 .033 110. -.030 11.6 9.5 14.4 19.4 10.3 12.9 7.2 17.7 15.4 11.3 (W/S) WIND DIR (990) 280. 317. 305. 350. 325. 332. 339. 346. 353. 359. 359. 350. 846.3 8.665 589.8 574.4 556.8 551.7 509.5 802.8 794.3 PRESS (MB) 763.7 150.8 734.1 105.3 700.0 1.119 651.1 654.9 825.7 653.8 RADIOSCNDE 1523. 3350. 1111 305. 1219. 1828. 2132. .609 914. 2101. 2437. 2741. 2866. 3046. 3285.

C-45

1.032 3.874 3.818 4.174 1.242 2.028 1.087 1.340 1.877 1.002 1.162 3.956 .304 1.850 .747 .269 2.284 (DEG K) (\*1000) UTHV/D2 284.5 284.9 285.9 287.0 289.3 233.3 287.3 288.3 289.2 290.6 8.062 292.3 284.1 291.2 289.1 290.2 290.2 282.7 284.2 (GM/KG) 2.0 1.5 1.4 1.5 1.8 1.7 DPGWV -3.5 -8.3 -12.4 -15.0 -16.7 -19.9 -19.7 -23.3 -27.2 4.4--5.8 -6.4 -30.1 -10.6 -24.0 -28.9 DEWPT -14.5 -18.1 DATE 02/03/77 TIME 06:00:00 LOCATION (DEG C) -3.8 TEMP -3.0 -3.3 -7.1 -11.7 -14.0 -15.4 -17.5 -18.4 -10.2 -35.6 -16.6 -21.9 -25.1 -30.1 -26.4 -27.6 -22.5 -.059 -.150 -.148 .003 -.027 .082 .030 990. (#10) .000 .744 -.092 -.036 **20/00** 7.2 13.6 13.0 15.5 18.0 19.5 0.6 7.9 13.5 8.8 10.8 13.9 WIND DIR (DEG) 300. 335. 342. 350. 318. 351. 345. 344. 351. 329 355 357. 352. 348 835.3 700.0 642.8 859.3 850.0 758.8 734.3 106.0 678.3 805.8 575.7 563.8 551.9 195.1 764.7 8.099 (MB) 651.6 528.8 RADIOSONDE 1219. 2234. 3198. 3959. 224. 2027. 2132. 2673. 3655. 3 86. 914. 1588. 1828. .609 2741. 4053

25	(MB)	WIND DIR	(M/S)	(*10)	(DEG C)	(DEG C)	(GM/KG)	THV*	(*1000)
	860.0	305.	4.1	000		-6.3		83.	000
93.		319.	11.5	.796		-7.7		83.	5.210
.91						•		83.	.90
05.	827.4	~		033	9.4-	4.6-	2.3	283.9	.914
.60		333.	13.2	.079		-11.0		84.	5
.40						-		84.	.589
. 41		333.	15.2	990.	-10.0	-12.0		84.	9
.99					-11.3	•		84.	9
.61		337.	16.2	.033	-12.3	-13.1		85.	.82
3.		342.	5	023				86.	.40
38.					*		1.7	86.	2
.56		343.		042	14.	-		86.	4
.83		342.	13.4	077			1.4	87.	•06
.91				3.968		-19.1		87.	2.553
12.		336.	11.4-	10.066		0		88.	66.
.0.						-		89.	.76
37.				003	-20.1	-22.9	•	89.	2.886
.1.		343.	12.4	•036		5	8.	.06	64.
.94			2.	.003		-28.4	9.	91.	.78
31.					5	-29.6	9.	.16	.58
17.					9	0	.5	92.	.98
20.		8.	-	2	.9	-	• 5	92.	-
.50		10.	11.5	-	6	6	.2	92.	-
.91				4.628	-30.8	-44.2	1.	293.0	.869
.69		13.	9.6	8	-		.2	94.	-
.99					-31.2	-42.6	.2	295.0	10.669
.00		10.	6.6	.030	-		.2	. 46	

## PILOT BALLOON DATA

DAT 02/03		
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	325.0	5.7
146.	332.0	6.0
204.	338.0	6.2
259.	338.0	6.8
314.	338.0	7.0
369.	339.0	7.3
424.	340.0	7.5
479.	338.0	8.2
533.	336.0	9.0
588.	332.0	9.0
643.	329.0	10.0
698.	329.0	10.2
753.	330.0	11.1
808.	330.0	12.9
863.	330.0	13.8
918.	330.0	14.9
972.	331.0	15.0
1027.	331.0	15.0

1.326 2.112 5.520 2.290 1.906 4.096 -. 895 -.086 6.043 3.872 1.322 5.603 1.740 2.165 2.423 4.271 4.730 -3.353 DTHV/DZ (DEG K) 285.6 292.4 293.9 285.4 285.4 286.6 287.3 292.0 294.3 295.6 285.4 285.5 286.0 286.7 289.0 290.8 291.7 292.2 287.1 293.4 291.2 THV\* (GM/KG) DATE 02/03/77 TIME 11:00:00 LOCATION DPGWV (DEG C) -29.9 -17.8 -38.2 -28.5 -13.1 -21.7 -25.6 -26.6 -29.9 -29.5 -34.8 -15.6 -17.3 DEWPT -12.3 -13.7 -16.2 -38.1 (DEG C) -.8 -3.0 -6.0 9.6--17.5 -23.4 -23.6 -25.5 -29.6 0.6--27.1 TEMP -7.1 -15.9 -11.4 -13.8 -14.5 -18.8 -19.2 -21.0 -22.4 -23.2 -16.1 -27.7 -.056 .646 -.058 -.026 -.048 -.007 (\*101 .000 .112 .075 .026 .030 .007 -.056 .023 .033 -.063 -.010 20/10 (M/S) 15.0 15.8 15.0 12.6 10.9 10.6 11.3 4.1 10.5 9.3 13.2 11.5 111.1 WIND DIR (DEG) 326. 339. 341. 329. 340. 343. 351. 335. 342. 344. 337. 343. 9 5 6.961 758.8 6.619 577.3 860.7 850.0 788.3 700.0 652.9 587.8 579.8 553.6 537.8 530.8 828.2 683.8 (MB) 7.707 656.9 9.109 RADIOSONDE 766.3 620.8 2132. 2437. 2510. 3046. 305. 828. 66 609. 914. .166 219. 523. 607. 785. 2741. 2914. 3014. 3350. 3561. 3959. 1655.

1.945

\* VIRTUAL POTENTIAL TEMPERATURE

1.955

C-49

## PILOT BALLOON DATA

DATE 02/03/7		
HGT.	WIND DIR	WIND SPEED
(M)	(DEG)	(M/S)
76.	336.0	10.0
146.	335.0	9.9
204.	333.0	9.4
259.	333.0	9.0
314.	333.0	10.5
369.	333.0	10.6
424.	329.0	10.5
479.	328.0	10.1
533.	328.0	10.5
588.	328.0	11.1
643.	328.0	10.2
698.	326.0	9.2
753.	326.0	9.8
808.	326.0	9.1
863.	326.0	9.0
918.	326.0	8.5
972.	326.0	8.0

1.839 .974 -.270 -.350 1.405 1.259 2.176 1.995 3.201 3.765 2.832 4.121 7.763 -.301 3.367 1.307 8.511 2.021 2.232 3.110 .268 6.803 (\*1000) (DEG K) 288.2 288.4 288.6 288.8 289.1 289.2 290.8 292.0 292.3 292.9 294.6 295.9 296.3 297.1 287.5 287.5 287.5 287.4 287.3 287.4 287.8 291.3 293.6 293.7 294.3 THV\* (GM/KG) 9. 9. 4. 6. 9. DPGWV (DEG C) -14.9 -17.2 -24.5 -26.6 -13.3 -15.5 -15.9 -21.0 -28.4 -29.3 -29.5 -32.5 -33.9 -30.4 -13.8 -13.2 -14.4 -16.7 -20.1 -27.1 -31.8 -23.1 DATE 02/03/77 TIME 14:00:00 LOCATION (DEG C) -17.2 -17.6 -21.9 -22.2 -24.5 -25.5 2.1 0.4--6.9 -26.3 -28.1 -13.0 TEMP -12.2 -14.8 -16.0 -18.2 -19.8 -20.3 -22.1 -26.1 -.029 -.046 .010 .003 .000 .007 .049 .056 .033 910. .0013 20/no .000 .417 .016 (\*10) -.039 11.9 10.3 13.5 14.5 15.0 15.4 11.9 10.1 11.8 (M/S) 10.8 > WIND DIR (DEG) 330. 341. 335. 347. 356. -.01 21. 341. 339. 334. 338. 353. 681.0 654.8 642.3 517.8 (MB) 850.0 829.2 767.8 737.9 709.2 700.0 8.899 650.3 8.609 555.5 545.8 9.161 769.3 585.8 532.7 528.8 PRESS 603.5 9.198 628.7 579.1 RADIOSCINDE 1624. 2277. 2665. 2741. .1962 3046. 3063. 3350. 3479. 3959. 3 108. 305. 609 899. 914. 219. 523. 974. 2132. 2437. 3655. 3708.

C-51

## PILOT BALLOON DATA

DAT 02/03		
HGT.	WIND DIR (DEG)	WIND SPEED (M/S)
76.	349.0	10.4
146.	349.0	9.0
204.	348.0	7.5
259.	348.0	7.8
314.	348.0	7.8
369.	346.0	8.1
424.	345.0	9.0
479.	343.0	8.5
533.	341.0	8.0
588.	340.0	8.1
643.	340.0	9.0
698.	340.0	9.0
753.	340.0	8.5
808.	339.0	9.0
863.	337.0	9.2
918.	337.0	10.0
972.	337.0	10.0
1027.	336.0	9.9
1082.	337.0	9.5
1137.	337.0	17.5
1192.	337.0	26.0

5.005 .219 1.796 3.334 .364 ..500 .585 1.401 .822 .246 969. 8.636 DTHV/DZ (\*1000) 1.180 -7.427 -.024 -.164 8.601 4.817 3.295 3.564 (DEG K) 288.5 294.9 288.5 288.9 288.2 289.8 292.4 297.7 297.8 297.9 290.3 287.7 28882 288.3 288.4 288.5 288.4 288.7 290.4 294.7 296.9 THV\* (GM/KG) 2.0 1.9 1.8 1.5 1.2 1.0 6. 1.7 2.1 2.1 2.1 2.1 DATE 02/03/77 TIME 17:00:00 LOCATION DPGWV DEG CI -19.5 -25.2 -31.8 -10.1 -10.4 -14.3 -17.5 -12.2 -12.6 -15.5 -20.0 -24.9 -34.3 DEWPT -11.4 -13.5 -22.3 -10.7 (DEG C) -2.8 -10.5 TEMP 2.5 -5.9 -8.9 -11.6 -12.6 -16.5 -19.0 -19.6 -20.1 -25.1 -14.1 -20.7 -20.9 -23.0 -26.7 0000 .223 .046 .003 .000 .000 010 --.089 .300 .013 010-.089 20/00 (\*10) -.003 -.020 .007 -.027 17.4 0.11 12.5 12.4 11.8 14.5 17.0 11.8 11.8 (W/S) 11.8 11.5 17.2 WIND DIR (DEG) 315. 332. 343. 347. 12. 344. 337. 336. 345. 350. 347. 339. 336. 355. 850.0 700.0 683.0 630.2 580.5 556.9 (MB) 826.8 PRESS 830.7 7.661 723.8 711.0 656.0 604.9 RADIOSCNDE 1.691 739.7 624.3 583.3 516.8 512.3 800.3 534.1 3 2437. 2507. 121. 1388. 2132. 914. 219. 641. 29. 305. 603. .609 828. 2741. 3046. 3350. 3011. 3655. 3896.

RADIOSCNDE DATE 08/03/77 TIME 12:00:00 LOCATION DPSWV

7 (W)	PRESS	WIND DIR	U (M/S)	(01*) 20/n0	(DEG C)	(DEG C)	MR (GM/KG)	THV*	(*1000)
0	72.	45.	1.5	000.	10.6	-8.6	2.3	2	000
51.	866.7					12.	1.7	295.0	-10.321
5	50.	327.	2.5	.051	7.9		1.8	+	-1.578
a	42.				7.1	12.	1.8		638
0	40.	17.	2.2	028		-12.2	1.8	+	3.925
-	12.				5.5	5	1.4	2	4.261
0	.60	345.	3.9	950.	5.5	-15.8	1.4	5	.114
-	79.	329.	6.2	.075	2.1	-17.3	1.3	. 9	9
-	50.	317.		.056	1.	-18.8	1.1	.9	•
3	30.				-1.7	-19.9	1.1	1.	1.639
2	22.	314.	8.8	.030	-2.5	-19.2	1.2	1.	.321
9	.00	314.	9.1	.013	6.4-		1.4	1.	.484
~	.55	314.	1.6	000	-5.4		1.5	7.	.458
0	711.				6.7-	-14.3	1.9	7.	.754
3	68.	315.	8.7	013	-8.1	-15.3	1.7	1.	3.847
437.	43.	309.	8.3	013	1.6-	-24.1	8.	6	4.552
5	24.				-10.9		• 5		
4	18.	297.	8.6	010.	-11.5	-28.7	9.		•
4	93.	284.	10.4	.059	-13.9	-21.8	1.1	301.1	•
4	86.				-14.7	-19.6	1.4		
5	70.	276.	12.6	.072	-15.5	3.	4.	302.6	5.946
3	. 49				-15.6	-39.1	• 2		
4	48.				-16.7	-35.1	٤٠		5.469
	47.	273.	14.7	690.	-16.8	-35.1	.3	304.6	1.868
2	25.	275.	17.1	610.	0.61-	-33.2	**		3.167
-	00	2772	19.2	.058		0	9.	2	3.281

-.445 2.207 .924 2.720 1.766 1.149 .022 .893 8.840 10.395 .744 .834 .418 1.121 4.203 5.656 22.330 2.180 -.616 2.247 DTHV/DZ (\*1000) 2.607 DEG KI 297.7 297.5 298.2 298.4 298.6 298.9 302.8 304.5 297.6 297.6 305.3 297.6 297.3 298.6 299.6 303.0 303.8 305.2 THV\* [GM/KG] 1.8 8 8 6 . . . . 8 . 1.0 1.1.1 . DATE 08/03/77 TIME 14:00:00 LOCATION DPGWV (DEG C) -12.4 -12.5 -12.7 -12.8 -7.9 -12.8 -19.5 -21.0 -43.0 8.64--22.9 -20.6 -18.0 -15.9 -29.3 -43.4 -44.5 -45.5 4.94-DEWPT -22.1 -22.2 -46.6 1.84-(DEG C) TEMP 11.4 9.1-9.6 3.5 4. -1.5 -1.6 -4.2 -7.0 4.6-9.6-8.6--8.3 -3.7 1.6--11.4 -.007 .020 .195 640. 0000 .126 .347 .059 .049 .062 ZO/NO (01\*) -.113 -.026 -.042 -.900 -1.083 5.2 4.6 4.4 2.3 8.6 5.6 4.5 6.3 7.8 11.6 13.9 3.1 0. 13.7 (8/W) 4.1 AIO CNIW (DEG) 80. 29. 52. 301. 279. 287. 285. 288. 276. 282. 286. 0 273. 18 PRESS 870.8 850.0 908.6 779.0 149.8 729.8 722.5 720.3 695.0 647.3 626.3 294.0 552.8 0.007 548.4 526.4 (MB) 839.3 668.5 643.0 570.8 638.2 1.819 RADIOSCNDE 3 186. 523. 2386. 2437. 2495. 609 914. 1227. 757. 828. 3046. 3655. 3959. 305. 1443. 3596. 2132 2741, 3350 2641

8.769 10.477 2.049 -.495 11.158 2.033 -.508 1.986 1.914 1.492 .333 1.443 .493 .818 2.145 6.826 1.744 -.260 -.549 DTHV/DZ (\*1000) -16.871 (DEG K) 286.0 285.0 285.0 286.2 289.7 290.1 290.9 285.0 284.9 284.7 284.7 284.8 234.9 285.0 286.4 286.8 287.4 288.0 238.7 288.7 288.2 290.6 290.6 THV\* (GM/KG) 1.6 0 1 4 4 0 8 8 1 1 1 4 1.3 4 16 10 CATE 14/03/77 TIME 12:00:00 LOCATION DPSWV (DEG C) -11.0 -12.8 -13.2 -15.7 -28.4 -32.8 -17.4 -37.7 -37.7 -43.1 -13.9 -23.9 -29.2 -30.4 6.14-DEWPT -15.1 -20.7 -24.1 -35.3 -39.1 -40.5 -43.5 (DEG C) -7.6 -11.8 -14.8 -23.2 -28.3 TEMP 1.0 -.5 -1.4 -3.0 0.6-1.9--14.6 -16.0 -18.4 -20.8 -23.2 -25.7 -30.9 -33.0 -33.4 (\*10) .000 -.027 .016 .039 .013 .013 960. .016 .020 .030 650. .000 960 --20/00 -.020 -.008 -.011 6.3 4.8 5.9 6.3 4.2 4.7 6.2 0.9 4.9 8.6 4.0 13.5 13.5 1.9 6.3 11.3 2.8 (8/W) > WIND DIR (DEG) 333. 317. 333. 318. 305. 296. 285. 268. 265. 277. 293. 268. 254. 306 662 786.8 771.0 741.0 700.0 8.409 513.8 PRESS 850.0 833.4 801.3 683.9 656.5 60409 579.8 555.7 RADIOSCNOE (MB) 630.2 532.7 E 758. 1219. 1515. 1523. 2437. 2743. 66 149. 305. .609 654. .678. 828. 2132. 3350. 3655. 2741. 3046. 3913. 3959. 4102.

\* VIRTUAL POTENTIAL TEMPERATURE

144. -1.949 -2.343 -.032 -2.309 1.248 3.900 4.300 5.246 1.057 1.024 2.700 -2.118 .956 .715 .982 1.044 1.388 -1.544 13.239 DTHV/DZ (\*1000) (DEG K) 285.8 286.3 286.2 286.4 288.5 291.9 286.3 286.2 286.3 286.3 285.4 286.6 286.8 287.2 289.5 289.9 289.9 290.7 288.2 THV\* (GM/KG) 1.0 1.5 1.2 .5 === 1:1 1:1 DATE 14/03/77 TIME 14:00:00 LOCATION DPGWV (DEG C) -18.2 -18.2 -18.3 -18.3 -20.0 -29.0 -31.0 -33.7 6.04--43.0 8.44--50.0 -38.1 -45.1 -46.7 -30.2 -39.3 DEWPT -49.1 (DEG C) -1.5 -10.9 -22.6 TEMP -7.5 -12.5 -14.6 -17.7 -20.5 -25.3 -4.5 ----12.7 -16.0 -18.4 -20.6 -27.9 (410) -.020 --141 900. .000 060. .000 .010 .020 .021 .025 .062 .062 .043 .023 -.007 5.5 (M/S) 3.4 3.7 5.7 0.9 6.2 8.1 0.0 2.0 10.8 4.9 11.3 11.4 4.1 WIND DIR (086) 301. 309. 307. 306. 297. 267. 265. 266. 269. 278. 264. 313. 295. 308 266. 631.5 502.8 851.8 721.8 713.3 700.0 PRESS (MB) 834.2 774.8 742.3 8.199 557.3 533.9 5111.5 685.1 581.1 RADIOSONDE 802.6 621.9 605.9 560.8 2437. 33046. 432. 523. 665. .609 914. 828. .022. 2741. 3350. 305. 3655. +081. 1219. 888 3959. 132

.851 -.535 -.128 2.552 2.420 2.330 1.445 1.487 -.519 2.859 2.817 2.227 .380 .036 .308 1.818 1.340 DTHV/DZ (\*1000) 1.901 1.660 IDEG KI 288.5 288.4 288.4 288.4 288.9 289.4 290.4 292.8 294.3 296.0 288.5 288.4 288.5 289.2 289.4 290.2 294.3 292.1 288.6 293.6 THV\* (GM/KG) 1.7 1.8 1.9 1.9 2.0 1.2 9. DATE 30/03/77 TIME 12:00:00 LOCATION DPGWV -22.2 -30.5 -35.2 -11.8 -11.8 -12.3 -37.3 -41.2 -12.1 -19.4 -33.1 -35.7 1-04--10.8 -21.5 DEWPT -16.4 -36.7 (DEG C1 TEMP -8.3 -22.0 -28.1 4.0 3.1 -12.2 -17.5 -2.4 -8.9 -15.2 -27.0 -27.0 -1.7 -10.8 -13.2 -13.6 -19.7 -14.4 -24.3 -26.7 640. .042 0000 900. 0000 .013 .072 .078 .079 .056 .039 .049 .026 (01\*) .000 DU/DZ 2.4 2.0 4.3 6.5 1.9 8.9 13.8 2.1 12.6 11.9 10.6 (M/S) 1:1 WIND DIR (DEG) 326. 40. 148. 153. 350. 80. 146. 171. 177. 178. 181. 191. 200. 850.0 745.4 139.8 PRESS 812.8 684.5 516.1 (MB) 862.3 174.9 716.5 0.007 8.019 609.5 585.1 570.8 561.4 535.8 525.3 836.8 688.6 805.5 4.199 634.9 538.4 FADIOSONDE 3 828. 2132. 3959. 64. 179. 538. 1219. 2028. 3230. 0 305. 609 914. .523. 2741. 3046. 3350. 3655. 4186. 3690 3833.

C-58

-20.958 4.998 5.708 2.853 6.927 -.678 -.750 2.581 10.487 10.868 DTHV/DZ (\*1000) (DEG K) 311.3 296.0 295.8 296.0 296.0 297.9 300.7 296.0 298.4 300.3 306.3 308.0 296.3 296.2 312.8 298.3 2962 296.2 310.1 310.7 (GM/KG) 2.8 2.5 2.4 2.1 2.1 1.9 1.9 1.4 1.3 1:1 DATE 04/04/77 TIME 21:00:00 LUCATION DPGWV (DEG C) -12.1 -29.9 -6.6 -7.2 -7.8 -7.8 -9.1 -12.6 -26.6 -28.1 -29.7 9.9--18.6 -19.6 -21.9 -24.6 -25.5 -10.4 -13.9 DEWPT (DEG C) -3.6 0.4--3.6 -4.5 -5.6 -5.9 -7.5 -12.2 -12.5 -14.7 -3.6 -4.2 -5.5 -5.8 6.6-1.4-.048 .016 640. .145 .056 .053 .013 .000 .003 .076 0000 .007 000. .036 .036 1111 20/00 (01\*) 5.6 3.8 3.1 3.3 0.9 7.7 8.8 3.5 9.5 9.3 12.6 13.1 6.1 (M/S) WIND DIR (DEG) 322 . 100 319. 334. 343. 341. 339. 353. 327. 314. 331. 331. 332. 341. 336. 337. 325. 812.8 725.0 621.6 598.0 575.1 531.5 865.3 724.3 671.7 646.2 (MB) 783.0 753.8 708.6 666.1 PRESS 850.0 0.007 591.3 845.1 843.7 698.2 641.7 RADIOSONDE 2132. 2198. 2437. 2491. 2741. 3046. 3350. 3990. 243. 305. 914. 219. 523. 538. 7111. 828 3959. 609 915. 3655. 3135.

5.082

6.045

2.187

2,539

\* VIRTUAL POTENTIAL TEMPERATURE

6.940 7.201 2.757

9.367

.532

C-59

## Preceding Page BLANK - FILMED

APPENDIX D

RAWINSONDE DATA SALT LAKE CITY

MALLOSCACE	DAIL	DAIL 14/-2/11	וינה מצוו	מפיריים ד	ECCALLOR LEC	
ri £	FRESS	1EME ( ) EG 0 )	COEG C)	MR (SM/KG)	THV*	DT HV / DZ (*1000)
	878	-1.7	-3.9	3.3	282.3	
147.	862.	9 6	-2.4	3.7	283.4	48.5
	350.	٠ •	-2.0	3.9	231.0	13.4
	8C.C.	1.2	-8.8	2.5	292.9	2.8
	759.	-1.9	-6.3	3.0	294.1	2.8
	740.	-2.9	-11.9	2.1	254.9	4.4
1631.	717.	-4.1	-11.1	2.3	296.3	5.5
	700.	-4.5	-13.9	1.9	297.8	8.1
	661.	-6.5	-13.5	1.3	300.4	5.7
	562.	-13.1	-25.1	<b>0</b> 1	306.8	0.6
	500.	-19.1	-35.1	*.	339.8	3.6
			1A11707V *	LATTACTOR	100000000000000000000000000000000000000	1 4

	20/00	
PLACE	WIND SPEED	
71KE 35:00:30	WIND DIR (DEC)	
DATE 14/02/77	HEIGHT (M)	4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

RADIOSONDE	DATE	14/52/77	TIME	17:00:00		LCCATION SLC	ပ
Z (H)	PRESS (1	TEMP DEG C)	DEWPT (DEG C	-	MR GM/KG)	THV.	DTHV/DZ (*1000)
0.	880.	9.4	-2.8	9	3.6	293.7	
121.	867.	5.6			2.9	290.9	-23.3
283.	850.	3.8	-6.2		2.8	290.6	-1.6
11211	766.	-1.1	-16.1		1.4	293.9	3.9
1226.	756.	-1.7	-12.7		1.9	294.4	5.2
1834.	700.	-4.7	-19.7		1.1	297.5	5.1
2619.	634.	-8-1	-23.1		6.	302.1	5.9
2962		-10.3	-20.3		1.2	303.4	3.8
3415.	•	-11.3	-25.3		80	307.2	8.4
4145.	•	-15.7	-31.7		.5	310.2	0.4
4423.	.00	-18.7	-32.7		• 5		9.
HEIGHT (M)	WIND DIR		WIND SPEED	DU/DZ (*10)			
0.0	320.0	1	2				
283.	325.0	9	-2	-035			
542.	330.0	9	6.2	000			
847.	335.0	9	-2	.000			
1151.	350.0	2	.7	016			
1456.	10.0	7	.2	640.			
1834.	5.0	101	.3	.082			
2371.	10.0	12,	*	.039			
2980.	5.0	21		.143			
3283.	360.0	25	25.2	.135			
3590.	355.0	25	.2	0000			
1200	745.0	28	~	120			

RAPIOSONDE	CATE	15/1/1/	ייוב מפינויי	,	TOTAL TOTAL	
	PAESS	16.6	THMEG	æ	1 HV*	CTHV/DZ
9	( M3 )	(DE3 C)	(0 920)	(SM/KS)	() ES K)	(+1000)
	881.	-1.1	さっさー	3.1	282.5	
	871.	2.4	-3.5	3.4	287.3	50.1
	850.	2.4	-5.5	3.0	289.2	6.6
	787.	1.7	7.6-	2.3	291.1	2.1
956.	782.	-1.9	9-9-	3.0	291.6	8.5
	772.	-1.3	-13.3	1.8	293.1	14.8
	753.	-2.5	-12.5	1.9	293.9	4.2
	74C.	5.5	-15.5	1.5	297.5	26.3
	700.	-1.3	-14.9	1.7	300.7	7.2
	645.	-4.7	-16.7	1.6	304.6	6.2
	564.	-12.7	-21.7	1.2	307.0	2.3
443.	500.	-18.1	-34.1	4.	311.1	4.3

	CED DU/DZ (*10)	8	05	026	.11	.10	.05	90.	50.	02	00	0	
PLACE	WIND SFE			1.3				2.	4.2		9		
CS:CD:CO	WIND DIR	130.	140.	350.0	330.	340.	35	35.	40.	40.	40.	40.	1 1 1 1 1 1 1 1 1 1
DATE 15/02/77	HE I GHT		. 88	542.	47.	151.	456.	40.	371.	98	590.	44	

	DATE	DATE 15/02/77	TIME 17:00:00		LOCATION SLC	
-	P 25.55	TEMP	DEWPT	۲ ۲.	THV*	DTHV/ DZ
	(MB)	(DEC C)	(DEC C)	(GM/KG)	(CEG K)	( * 10CC )
	886.	12.2	8.4-	3.0	296.5	
	.0.	9.6	-7.4	2.5	294.7	-19.5
	.00	7.8	-8.2	2.4	294.8	m.
	800.	3.4	-10.5	2.1	295.2	8.
	.6	F	-13.3	1.8	296.7	2.9
-	12.	-1.1	-10.1	2.5	300.3	8.8
	.00	6.	-13.9	1.9	301.8	10.9
-	15.	-4.3	-22.3	1.0	305.0	4.3
11	.69	-12.5	-21.5	1.2	308.1	2.1
~	52.	-14.7	-28.7		309.7	4.3
	.00	-18.3	-28.3		310.9	2.7
			* VIRTUAL	VIRTUAL POTENTIAL	TEMPERATURE	

	DU/DZ (*10)		9	00	.ce9	()	80	-	61	-	10	+4	8	
PLASE SLC	WIND SPEED (MPS)		2.6	• 52			8.2	2	3	. 8	4		0	
TIME 17:00:00	WIND DIR (DES)	0	30.0	5.	85.	90.	0	20.	25.	20.	25.	20.	25.	
DATE 15/02/77	HE IGHT (M)	.0	290.	3	847.	15	5	85	90	19	98	2	50	

U	CT FV / DZ (*1500)		87.3	7.0	7.2	2.4	7.2	13.7	4.4	1.1
LCCATION SLC	THV*	284.5	291.5	292.9	298.8	300.5	301.5	305.3	313.0	313.4
	ra (cm/kg)	3.1	2.5	2.5	2.1	2.3	o. €1	7.	• 2	
בוגם מפימנים	COECO C)	h* h-	-7.4	₽•8-	-11.4	-11.1	-14.1	-32.3	-41.9	-46.1
DATE 16/02/77	TEMP ( 0.250 0)	10	6.6	5.5	3.6	-2.1	-4.1	-2.3	-11.5	-15.1
	FRESS (MS)	880.	871.	850.	768.	700.	674.	655.	532.	500.
RADIOSCNDE	(H)	0.	84.	283.	1109.	1855.	2157.	2384.	4527.	4473.

	DU/02 (*10)		-	M	()	10	0	-	N	4)	051	CI	n
PLACE SLC	WIND SPEED								0	m	10.3	8	01
7 INE 05:00:30	WIND DIR (DEC)	40.	50.	65.	90.	50.	85.	C.C.	00	000	315.0	30.	20.
DATE 15/02/77	HEIGHT (M)	0	œ	#	#	15	45	8	27	88	3590.	19	47

TEMP DEWPT MRR  (DEC C) (DEC C) (GM/KG)  13.2 -1.8 3.8  10.6 -6.4 2.7  10.6 -6.4 2.7  10.6 -8.8 2.7  -1.9 -17.6 1.4  -2.5 -28.5 -46.5  -11.5 -28.5 -6  -11.5 -46.5 .1  * VIRTUAL POTENTIMES OF COMPANY  TR WIND SPEED DU/DZ  (MPS) (*10)  5.2 -17.7  0 5.2 -17.7  0 5.7 -14.9  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 5.7 -17.7  0 6.8 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -17.7  0 7.7 -	RADIOSONDE	DATE 16/	11/20	H	7:00:00	LOCATION SL	O
877. 13.2 -1.8 3 867. 10.6 -6.4 2 800. 8.2 -8.8 2 7003 -16.3 1 6791.9 -17.6 1 6422.5 -28.5 5 56311.5 -28.5 5 56311.5 -28.5 7 56511.5 -28.5 7 56711.5 -28.5 7 77 17:CC:CC 5LC 5LC 777 (*10) (*10) (MFS) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*1	Z (M)	RESS ME)	E G P	2 S	MR (GM/KG	THV*	DTHV/DZ (*1000)
867. 10.6 -6.4 2 856. 10.6 -5.4 3 800. 8.2 -8.8 2 7003 -16.3 1 6791.9 -17.6 1 6422.5 -32.5 56311.5 -28.5 56011.5 -28.5 77 17:CO:CO GLC 77 180.0 180.0 6.5 7 855.0 8.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0.00 85.7 0		877.	1 6	1 4		1 8	
85C. 1C.6 -5.4 3 800. 8.2 -8.8 70C3 -16.3 1 6422.5 -32.5 56311.5 -28.5 50C16.5 -46.5 77 17:CC:CC 5LC 77 17:CC:CC 5LC 77 17:CC:CC 5LC 77 17:CC:C 5LC 77 17:CC:C 5LC 77 17:CC:C 5LC 77 255.C -177 18C.0 5.7 -173 255.C -5.7 -149 19C.0 5.7 -149 19C.0 5.7 -149 19C.0 5.7 -16.5 285.C 11.3 -16.3 29C.0 11.3 -16.3 29C.0 11.3 -16.3 29C.0 11.3 -028 295.C 11.3 -028 295.C 11.3 -028 295.C 18.5 -047		867.	0	9		296.1	0
8.2 -8.8 2 7003 -16.3 1 6422.5 -32.5 56311.5 -28.5 50016.5 -46.5 177 17:CC:CC GLC MIND DIR WIND SPEED DU/DZ (DE0) (MPS) (*10) 350.0 5.2 -177 180.0 4.6 -149 190.0 5.7 -177 180.0 5.7 -16.5 255.0 7.7 -177 255.0 5.7 -173 255.0 11.3 -163 255.0 11.3 -163 255.0 11.3 -163 255.0 11.3 -163 290.0 15.5 -091 290.0 15.5 -091 290.0 24.2 -047		85C.	ċ	5		7.	10.1
7003 -16.3 1 6422.5 -22.5 56311.5 -28.5 50016.5 -46.5  TIME PLACE  TIME PLACE  VIRTUAL PUTE  VIND DIR WIND SPEED DU/DZ (DE0) (MPS) (*10)  350.0 5.2 -177 180.0 4.6 .149 190.0 5.7 .000 235.0 5.7 .000 255.0 7.7 .066 280.0 9.8 .069 285.0 11.3 .163 290.0 15.5 .091 295.0 11.3 .028 295.0 20.1 .028		800.				0	5
6791.9 -17.6 1 6422.5 -22.5 56311.5 -28.5 50C11.5 -28.5 50C16.5 -46.5  TIME PLACE  WIND DIR WIND SPEED DU/DZ (DE0) (MPS) (*10) 350.0 5.2 -177 180.0 4.6 .149 190.0 5.7 .000 235.0 5.7 .000 255.0 7.7 .066 280.0 9.8 .069 285.0 11.3 .163 290.0 15.5 .049 295.0 20.1 .028		700.		16.		2.	
5622.5 -28.5 56311.5 -28.5 50016.5 -46.5  TIME PLACE  * VIRTUAL POTE  WIND DIR WIND SPEED DU/DZ (DES) (MPS) (*10) 350.0 5.2 (*10) 355.0 5.2 (*10) 235.0 5.7 (*10) 235.0 5.7 (*10) 255.0 11.3 (*13) 290.0 15.5 (*13) 290.0 15.5 (*14) 290.0 15.5 (*15) 290.0 24.2 (*16) 290.0 24.2		679.	1.	-		3	
56311.5 -28.5 5 50016.5 -46.5  TIME PLACE  WIND DIR WIND SPEED DU/DZ (DES) (MPS) (*10) 350.0 5.2 355.0 5.2 355.0 5.7 .056 235.0 5.7 .066 235.0 5.7 .066 225.0 11.3 .163 225.0 11.3 .163 225.0 11.3 .163 225.0 11.3 .069 225.0 11.3 .069 225.0 11.3 .069 225.0 20.1 .028		642.	01	2	7.	7.	
TIME PLACE  TIME PLACE  TIME PLACE  TIME PLACE  TIME PLACE  TO SLC  WIND DIR WIND SPEED DU/DZ  (DES) (MPS) (*10)  360.0 5.2  355.0 5.2  355.0 5.7 .036  235.0 5.7 .066  285.0 7.7 .066  285.0 11.3 .163  290.0 15.5 .091  295.0 11.3 .028  295.0 20.1 .028			11.	28.			
TIME PLACE  TIME PLACE  77 17:CC:CC SLC  MIND DIR WIND SPEED DU/DZ  (DEG) (MPS) (*10)  360.0 5.2  355.0 5.2  355.0 6.5  235.0 5.7  236.0 9.8  236.0 9.8  285.0 11.3  290.0 15.5  295.0 11.3  295.0 20.1  295.0 20.1			16.	46		m	•
350.0 5.2 180.0 4.6 190.0 6.7 235.0 5.7 265.0 7.7 280.0 9.8 285.0 11.3 290.0 15.5 295.0 20.1 295.0 20.1	E I GHT (M)	00	IND MPS)	PEED	0U/DZ (*10)		
355.0 .5 -177 180.0 4.6 .149 190.0 5.7 .000 255.0 7.7 .000 285.0 11.3 .069 290.0 15.5 .091 295.0 20.1 .026 295.0 20.1 .026	0.	60.					
180.0 4.6 .149 190.0 5.7 .030 265.0 7.7 .000 280.0 9.8 .069 285.0 11.3 .069 295.0 18.5 .091 295.0 20.1 .026	266.	55			-		
190.0 5.7 .036 235.0 5.7 .000 265.0 7.7 .066 280.0 9.8 .069 285.0 11.3 .163 290.0 15.5 .091 295.0 20.1 .026 290.0 24.2 .047	542.	80.	4.6		.149		
235.0 5.7 .000 265.0 7.7 .066 280.0 9.8 .069 285.0 11.3 .163 290.0 15.5 .091 295.0 20.1 .026 295.0 20.1 .026	847.	90	5.7		536		
265°C 7°7 °C66 280°0 9°8 °D69 285°C 11°3 °D69 290°D 15°5 °D91 295°C 18°5 °D49 295°C 20°1 °D26 290°C 24°2 °C47	1151.	35.	5.7		200		
285.0 11.3 163 285.0 11.3 163 290.0 15.5 081 295.0 18.5 049 295.0 20.1 .026	1456.	65.	7.7				
285.0 11.3 290.0 15.5 295.0 18.5 295.0 20.1	1761.	80.	9.8		690		
295.0 18.5 295.0 18.5 295.0 20.1 290.0 24.2	1853.	85.	1-4		.163		
295.C 18.5 295.C 20.1 290.C 24.2	2371.	.06	S		.091		
295.C 20.1 290.C 24.2	2980.	95.	8		640.		
290.0 24.2	3590.	95.	C		.528		
	. 2944	90.	3		743.		

PACICSCNDE	4	11123111				•
7 (S)	FRESS (MS)	TEME (DEG C)	DEWPT (DEG C)	MR (GM/KC)	THV*	DTHV/DZ (*1000)
0.	877.		-3.4	3.4	284.2	
112.	865.	5. C			290.5	40
257.	350.	7.0		2.7	294.0	4
755.	8CC.	8 · C	6	2.4	300.1	12.4
1833.	700.	-1.3		1.5	301.3	1.1
4326.	512.	-16.9	6.94-		310.4	3.6
3	.003	-18.7	•	9.	310.4	•2
2ATE 17/02/17	TIME	FLACE				
HEIGHT (M)	WIND DIR	S GNIM	P EE 3	DU/52		
0	160.0	2.1				
257.	195.0	3.6		058		
542.	240.0			יכמם		
847.	285.0	6.2	•	0.85		
1151.	285.□		•	643		
1456.	285.0	10.3	•	285		
1839.	285.0	12.9	•	•068		
2371.	290.0	13.9	•	019		
2980.	290.0	16.5		.043		
3590.	290.0	20.5	•	190		
477.	7976	21.6		F.12		

		!									
	DT HV / DZ (*1000)		-27.8	. 3	1.4	9.	2.1	21.4	14.0	1.8	
LCCATION SLC	THV*	300.3	298.2	298.4	3000	300.8	301.2	302.5	305.3	308.3	TEMPERATURE
	MR (GM/KS)	2.9	3.0	2.7	2.2	2.2	1.4	1.0	۳.	•1	POTENTIAL
TIME 17:00:00	DENPT (DEG C)	-5.4	-5.2	-6.8	-12.1	-12.5	-17.9	-22.3	-36.7	-50.3	* VIRTUAL
DATE 17/02/77	TEMP (DES C)	15.6	12.8	11.2	-2.1	-5.5	-7.9	-7.3	-6.7	-20.3	
	FRESS (MB)	877.	869.	850.	70C.	659.	643.	638.	622.	500.	
RADIOSCNDE	(K) Z	0.0	76.	267.	1847.	2327.	2515.	2574.	2771.	4433.	

3.

	00/02		00	-	05	90	5	U	050	m	M	+1	U	
PLACE	WIND SPEED (MPS)								7.7		7	8		0
TIME 17:00:30	WIND DIR	00.	10.	15.	10.	90.	80.	85.		95.	15.	10.	.00	
DATE 17/02/77	HEISHT (R)	C	10	3	84	15	45	84		37	98	59	13	4433.

U	DT FV ZBZ (*1000)	101 103 109 109 109 109 109	čE	
CCATION SLO	THV.	283 293.7 293.7 293.7 302.7 302.5 302.5	TEMPERATUR	
מביננ ו	RE (SM/KG)	8888444 466488884	POTENTIAL 702 101	
TIME CS:	DEWPT (DEG C)	11111111111111111111111111111111111111	E VIRTUAL SPEED DU	
152177	TEMP DEG C)		PLACE SILO SILO SILO SILO SILO SILO SILO SILO	200 00 00 00 00 00 00 00 00 00 00 00 00
DATE 18	PRESS (MB)		TIME 05:00:3 WIND DIR (DEG)	3200 3200 3200 3100 3100 3100 3100 3100
RADICCONDE	Z (%)	282. 1196. 1196. 2776. 3893. 4423.	DATE 18/C2/77 HEIGHT	282. 11842. 11847. 12887. 2371. 2390.

	-	TOUTO		0	TUV	OTUNED?
(DEC C)		CDEG C		(GM/KG)	(CEG K)	(+1000)
15.0		-7.0		2.6	299.4	
-				2.3	296.6	-26.1
9.6		4.6-		•	296.€	1
-3.7		-16.7		1.5	298.7	1.3
-7.7		-24.7		۰.	304.1	5.9
-19.9		-36.9		•3	308.8	2.9
	*	VIRTUAL		POTENTIAL	TEMPERATURE	3E
TIME PLACE	80					
DIR WIND	S	033	0U/0Z (*1C)			
3	9.					
4	7.		017			
4	٠.		000			
325.0 5.1	1.		.052			
7	2		040			
۱ م			016			
			-115			
			.079			
1	. 3		-082			
16			.085			
20			.067			
2			+80.			
2	1		-			

2 (A)	FRESS (MB)	12KP (0800)	DIWPT (0886.0)	MR (GM/KS)	THV.	DT FV / DZ (*1000)
0	857.	1.5	-5.4	2.9	286.7	
66.	86 C.	٥.	-7.0	2.6	285.7	-16.0
163.	850.	.2	-7.8	2.5	286.8	11.8
79.	700.	-13.5	-15.7	1.6	287.8	
123.	587.	-14.9	-14.9	1.7	287.8	•1
.25.	601.	-22.9	-23.5	01	289.7	1.8
163.	5 90 •	-24.5	-30.5	••	289.3	-2.9
3871.	522.	-31.7	-38.7	m.	290.8	1.8
4133.	500.	-34.3	-40.3	•2	291.3	1.6

	DU/32 (*10)		9	M	w	11	()	M	0	4	025	3	S	
PLACE	WIND SPEED					ن		-	7.	4.	12.9	5		
TIME 05:00:30	WIND DIR (DEG)	00	80.	65.	60.	65.	73.	75.	80.	.06	280.0	75.	. 55	
DATE 24/02/77	HEISHT (M)	<b>a</b>	9	238.	#	3	5	1456.	19	37	2980.	59		

2 F	FRESS (MB)	TEMP (DEG C)	COEC	T (GM	MR M/KG)	THV.	DT HV (+10
9-6	870.	2.5	-3.0	3	3	286.5	
84.	8F.1.	2			, •	82.	1
182.	850.	-3.7		2		282.7	
W	821.		9		2.8	82.	
	700.	-15.3	5		.7	0	
2048.	667.	-18.3				86.	
2 985.	588.			7	3.	89.	
4133.	20C.	•	6	3	•5	91.	
			-	KIUAL TOTE	I I I I	. IEMPEKATURE	JRE
DATE	TIM		لنا				
24/02/17	17:00:	כם צר כ					
HEIGHT	ID ONIM	R WIN	SPEED	za/na			
(M)	(DE3)	(MPS)		(*10)			
	340.0	3					
182.	340.0	4.6	••	000			
542.	320.0	5		.017			
847.	305.0	7		-082			
1151.	3000	10		640*-			
45	300.0	01	•	.118			
1681.	295.0	6		622			
37	290.0	3		038			
, 2980.	290.5	6		51			
28	290.0	σ	•	017			
53	300.0	00		036			
13	315.0	7	61	018			
4199.	715.0			163			

0	074V/0Z (+1000)	W 4 H 4 M H M	뷮	
STATION SEC	THV.	2882 2882 2883 2883 2883 2983 2983 2983	THE KA TO KE	
כר כס:ככ	MR (GY/KG)	1124444 1200142	Polen Lat.	
TIME 05:0	DEWPT (DEG C)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PEED DU/DZ	
5/02/11	TEYP IDEG C)	1	PLACE SC SLC SLC SLC (MEND S	2000 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0
DATE 2	P9555 (ME)	870. 870. 749. 720. 583.	S I I I	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
RADIOSONDE	Z (M)	11111111111111111111111111111111111111	25/02/77 25/02/77 HEIGHT	187. 542. 847. 1151. 1456. 2371. 2990. 4123.

RADIOSONDE	DATE 25/	11/20	TIME 17	7 00:00:	LOCATION SL	Q
Z (M)	PRESS (MB)	TEMP DEG C)	DEWPT (DEG C)	MR (CM/KE)	THV.	DTHV/ (+150
0	875.		1 .		1:	
73.	85C.	-1-1	-11-1	2.1	283.7	-53
811.	739.		0		3	•
1262.		-	5		:	2.
S	•	-14.7	1.			
1734.		15.	1		5.	3
1871.	7.	9	9		•	8
-	1.	8	6	5.	.9	4
2	1.		48	••	288.4	14.
-	5.	•	43	••		.i
	500.	1:	-44.5		294.7	•
DATE 25/02/17	TIME 17:00:30	PLACE				
HEIGHT (M)	WIND DIR	WIND S	SPEED DI	00/02		
0		5.7				
M			ĺ	2		
542.	•		1	-		
847.				#		
1151.	•			02		
1456.				O		
1734.	•			CO		
	340.0	7.7		-017		
8		-1		0 .	The second second	
3530.				40		
n	•	100		n 1		

7	FRESS	TEMP	DENET		0: X	THV*	6
3	(66)	10 0EC	0 930)	6) (3	MZKG)	(X 03C)	(+1000)
9.	878.	7	-6-7			83.	
259.	85C.		7.8-			86.	12.9
742.	870.	-1.3	-9.9	3	2.2	89	6.1
.375.	738.		00	•		90.	1.2
789.	700.	7.6-	#	10		92.	4.3
£78.	674.	-11.9	5		1.7	92.	2.4
543.	634.	-14.5	M		σ,	. 46	4.4
603.	629.	-14.5	+4	•	<b>5</b> .	95.	9.8
908.	. 408	-14.7			<b>5.</b>	98.	10.6
450.	562.	-16.7	2.		₹.	C2.	7.1
892.	529.	-23.5	-30.5		9.	03.	1.7
4323.	500.	-23.1	7				₽ C) •
EIGHT	WINE DIR	GNIM	SFEED	0/0			
(H)	-	(MPS)		(*10)			
ö	140.0	4.6					
238.	170.0	9.8		4			
259.	C			.000			
542.	U			-			
847.	10			11			
1151.	40			M			
1456.	290.0	3.5		640.			
1761.	W			C			
1789.	2			U			
2066.	5			m			
2371.	10			S			
2980.	U	13.4		.067			
1.777				-			

7 (M)	PRESS (MB)	TEMP (DE 6 C)	DEWPT		MR GM/KG)	THV*	07HV/0Z (+10GC)
0	876.	10.0	0-7-		2.6	295.1	
	860.	8.2			2.3	294.2	-10.2
1476.	850.	7.4	-9.6		2.2	294.3	•
	.008	2.5				293.9	6.1
1749.	700.	-4.7				297.5	-17.4
	623.	12				298.2	
	573.	17				3000	
100	551.	13				351.0	
	535.	-21.1				361.7	
	528.	21				302.5	8.6
	.003	-25.1	-30.0	•	9.	3€2.€	• 5
HEIGHT	0	IR MIND	SPEED	DUZDZ			
(M)	-	(MPS)		(*10)			
0.	1 0	80					
189.	0	8		203.			
542.	170.0	10.8		.074			
847.	:	11		L			
1151.		6		386			
1456.	0	7		C			
1749.	0	80		()			
2066.	5	83		000			
2371.		8		C			
2980.	:	11		u			
3590.		13		.034			
1,707				(			

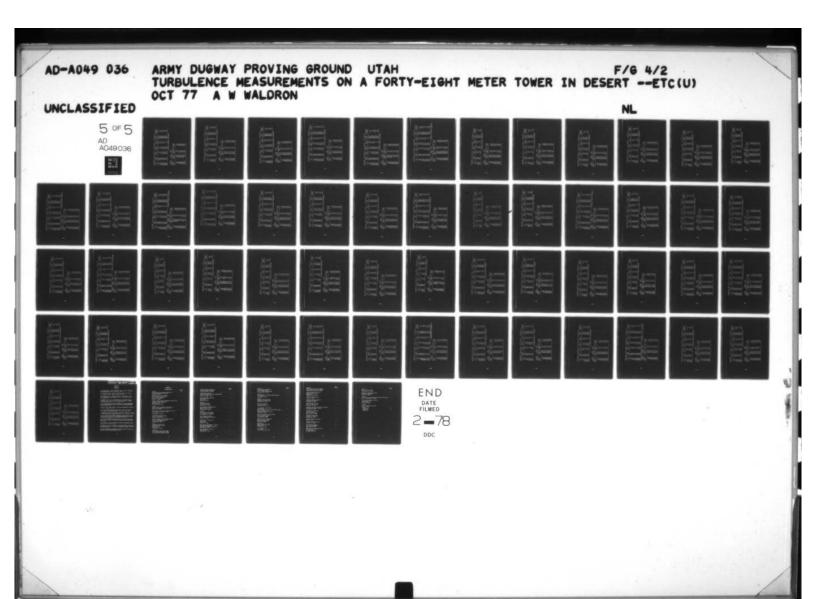
Z FRESS TEMF CEWPT PR THV* DTHV/DZ (M) (MB) (DEG C) (GM/KG) (DEG K) (*1000)  3. 863.	RADICSCNDE		DATE DIACEATA	TIME CS:CD:DC		FCCATION SEC	
863. 2.2 -3.8 3.3 287.8 8555.5 83.0 286.2 8555.5 3.0 2.8 287.8 7883.3 -8.3 2.6 2.8 287.3 7009.5 -14.5 1.8 292.3 65113.9 -18.6 1.3 293.4 60917.7 -18.4 1.5 294.7 55028.1 -29.2 .7 298.9 81.8 60928.1 -29.2 .7 298.9	2	FRESS	75%	DEWPT	5. 0.	1 HV*	DT HV / DZ
863. 2.2 -3.8 3.3 287.8 255. 3.0 286.2 2803.	(¥	( M3)	(050)	(0 930)	(GM/KS)	CSES K)	(+1000)
80C5 -5.5 3.0 286.2 -7.3 2.8 287.3 7883.3 -8.3 2.6 287.3 287.3 70C9.5 -14.5 1.8 292.3 65113.9 -18.6 1.3 293.4 60917.7 -18.4 1.5 294.7 55222.3 -24.1 1.5 294.7 50C23.1 -29.2 .7 298.9 -7.8 50023.1 -29.2 .7 298.9	.0	863.	2.2	-3.8	3.3	287.8	
8004.1 -7.3 2.8 287.3 7883.3 -8.3 2.6 289.3 7009.5 -14.5 1.8 292.3 65113.9 -18.6 1.3 293.4 60917.7 -18.4 1.5 294.7 55222.3 -24.1 1.5 298.9 * VIRTUAL POTENTIAL TEMPERATURE	118.	85C.		-5.5	3.0	286.2	-13.9
7883.3 -8.3 2.6 289.3 70C9.5 -14.5 1.8 292.3 65113.9 -18.6 1.3 293.4 60317.7 -18.4 1.5 294.7 55222.3 -24.1 1.5 294.7 50028.1 -29.2 .7 298.9	609.	800.	-4.1	-7.3	2.8	287.3	2.3
70C9.5 -14.5 1.8 292.3 65113.9 -18.6 1.3 293.4 60917.7 -18.4 1.5 294.7 55222.3 -24.1 1.C 297.5 50028.1 -29.2 .7 298.9 * VIRTUAL POTENTIAL TEMPERATURE	730.	788.	-3.3	-8-3	2.6	289.3	17.2
65113.9 -18.6 1.3 293.4 60917.7 -18.4 1.5 294.7 55222.3 -24.1 1.C 297.5 50028.1 -29.2 .7 298.9 * VIRTUAL POTENTIAL TEMPERATURE	645.	700.	-9.5	-14.5	1.8	292.3	3.2
60317.7 -18.4 1.5 294.7 55222.3 -24.1 1.5 297.5 50028.1 -29.2 .7 298.9 * VIRTUAL POTENTIAL TEMPERATURE	263.	651.	-13,9	-18.6	1.3	293.4	1.9
50022.3 -24.1 1.C 297.5 3. 50023.1 -29.2 .7 298.9 2. * VIRTUAL POTENTIAL TEMPERATURE	706.	.609	-17.7	-18.4	1.5	294.7	2.6
50023.1 -29.2 .7 298.9 2. * VIRTUAL POTENTIAL TEMPERATURE	439.	552.	-22.3	-24.1	1.0	297.5	3.9
POTENTIAL	153.	2009	-28.1	-29.5		298.9	2.0
				* VIRTUAL	POTENTIAL		
	77/70/10	250	מוציוחונים מוני				

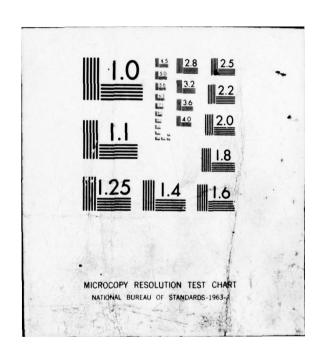
	00/02 (*10)		-	-	-	-	D	O	-	4	000	5		9	******
PLACE SLC	WIND SPEED (MPS)									4	11.9	3	.9	9.	
TIME 05:00:30	WIND DIR (DEG)	20.	10.	95.	.00	10.	75.	90.	.06	85.	185.0	90.	95.	05.	
DATE 01/03/77	HEIGHT (M)	0	-	m	#	#	15	45	19	37	2676.	98	59	15	

	7									
	DT FV / DZ (*1300)		-14.7	1.0	3.1	2.6	2.8	1.0	3.2	E .
LCCATICN SLC	THV.	286.3	284.7	285.1	288.3	289.5	292.5	293.4	293.7	TEMPERATURE
	MR (GM/K3)	3.7	3.0	2.8	1.7	1.4	9.	۳.	•5	POTENTIAL
TIME 17:00:00	DEWLT (DEG C)	-2.5	-5.5	-7.2	-14.7	-18.3	-29.7	-36.1	-40.3	* VIRTUAL
DATE 01/03/77	TEMP (DEG C)	0	-1.9	-6.1	-13.1	-16.5	-23.7	-31.1	-32.3	
	FRESS (MB)	852.	85C.	800.	700.	658.	574.	511.	. 30C	
RADICSCNDE	2 (X)	0	108.	583.	1620.	2094.	3126.	3986.	4093.	

	DU/DZ (+10)		0	2	.033	0	M	M	u	0	3	+4	M	
PLACE SLC	WIND SPEED (MPS)				6.7									
TIME 17:00:CC	WIND DIR (DES)	80.	75.	.00	310.0	90.	85.	75.	50.	20.	20.	10.	00	
DATE 01/03/77	HEIGHT (M)	0	0	3	847.	15	45	62	~	67	98	59	60	

	DT FV/DZ (*1000)	-5 -7 -1 -0 -0	ų,									
CCATION SLC	THV.	282.7 282.2 283.3 294.7	TEMPERATURE									
יני: מני	MR (GM/KF)	ww.ca	POTENTIAL		pu/pz (+10)	054	069	000	035	.016	036	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
TINE DS:	COEG C)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	* VIRTUAL	ы	SFEED DU						•	
77/23/20	15MP DEG C)	-2.9 -4.3 -13.1		PLASE	UIND (MPS)	2.6	97	7.2	7.7	8.0	1.1	4 . 1
DATE 02/	PRESS (MS)	8850. 700. 500.		TIME	WIND DIR (DES)	140.0	325.0 315.0	325.0	325.0	350.0	355.0	70.0
RADICSCNDE	( H )	92. 1500. 4073.		DATE 02/03/77	HEIGHT (M)	92.	542.	1151.	1600.	2980.	3283.	4073.





2	PRESS	TEMP	DEWPT	A.R.	THV.	0
£		(DEC C)	IDEG C	) (GM/KE)	(DEC K)	=
0	866.	ů.	-2.7		85.	
146.	350.			3.	. 48	
416.	821.	-4.5	6.4-	M	284.8	
895.	770.			2.	86.	
1658.	700.	-13.3		1.	88.	
3073.	579.			1.	. 46	
3405.	553.				95.	
3656.	534.			•	96	
3960.	512.		-28.8		9	
4143.	200	-28.5	-39.5	•2	0	
HEIGHT (M)	WIND D	CNIW AI	SPEED	0U/0Z (*10)		
	1 1 6					
	1 0	) L		8 0 0		
542	370.	200		160		
847.	30	11 0		.167		
1151.	35	14.		380.		
45	335.	5 14.		.016		
1658.	335.	0 13.		050		
2371.	350.	1		000		
98	355.	11.		634		
59	355.	13.		•026		
4147		1		-527		

2 E	FRESS (MB)	TEMP (DEG D)	DENPT (DES C)	MR (GM/KC)	THV+	C+1000)
n.	867.	-1.7	# · # -	3.2	283.3	
157.	850.	-3.3	-7.9	2.5	283.1	-1.2
303.	735.	-11.7	-11.8	2.1	285.9	2.4
662.	700.	-14.3	-14.7	1.7	287.0	3.0
319.	642.	-19.1	-19.2	1.3	288.5	2.5
470.	623.	-19.3	0.02-	1.2	290.1	9.6
721.	608.	-19.9	-23.9	. 5	292.1	8.0
133.	50C.	-30.5	-45.5		295.9	2.1

	20/DZ (+13)		U	N	-	-4	-	N	3	640.	M	-	+4	
PLACE	WIND SPEED	3.1								7.2				
TIME CS:CD:CC	WIND DIR (DES)	10.	10.	25.	30.	10.	10.	10.	30.	330.0	25.	15.	050	
DATE 03/03/77	HE IGHT (M)	0.	10	#	#	-	40	99	37	2676.	98	39	13	

2 (H)	FRESS (ME)	TEMP DEG C)	CDEG C	<b>+</b> 60	MR (GM/KG)	THV*	DT FV/ (*100
3	958	2.8	-7.2		2.6	287.8	
172.	850.						-1:
814.	783.						
1686.	700.	M	-14.4		•	-	
1805.	689.	+				-	
1937.	677.	w)		4		288.7	7
2891.	596.	-				_	
3645.	537.	9				-	m
4163.	500.	-29.3	-34.0	_	<b>*</b> .	-	
DATE 03/03/77	17:00:0	e	<b>H</b>				100 85 100
HEISHT (M)	WIND DIR (DEC)	WIND	SPEED	0U/D			
0	340.0	3.					
172.	3	3.1		.000	0		415
542.		**		.02	7		
847.		6.2		900	6		
1151.		ε•		-01	9		
1456.	310.0	5.0		016	9		
1686.		5.	_	02	2		
2371.		4.6		61	9		
2980.		. 2	_	.01	80		
3283.		5.1		. 50	O		
259C.		6.1	1	.C3	3		
2363				20	-		

2	PRESS	TERP	DEWPT	O. E.	THV	DIHVIDZ
(%)	(MB)	(CEE C)	(DEC C)	(GM/KG)	(CEG K)	(+1000)
.0	871.	-1.1	8-2-	3.3	2€3.€	
74.	363.	-2.1	-3.0	3.5	283.3	-3.5
198.	85C.	-2.9	-3.5	3.5	283.7	0.00
663.	800.	7-9-	-6.8	2.9	284.5	1.7
942.	772.	-8.5	8.8-	2.5	285.4	3.3
1174.	749.	-10.1	-13.4	1.8	286.3	2.6
705.	700.	-13.9	-15.9	1.6	287.4	2.5
152.	659.	-17.5	-17.8	1.4	288.3	2.1
2862.	598.	-23.3	-27.9	9.	289.€	8.1
3197.	571.	-26.3	-26.5	80.	289.9	1.0
3548.	544.	-27.9	-31.9	• 5	292.€	0.9
4163.	500.	-32.1	-38.1	.3	294.0	3.2

	DU/DZ (*10)		M	5	.102	0.0	8	C	10	20	2	0
PLACE	WIND SPEED (MFS)	1.5			7.2					ن		6
TIME 05:00:00	WIND DIR (DEG)	0	55.	50.	350.0	40.	30.	35.	40.	35.	40.	45.
DATE 04/03/77	HEIGHT (M)	0	0	3	847.	15	45	75	37	8	59	16

2 (M)	FRESS (MB)	TEMP (DEG C)	DEWPT (DEG C)	MR (GM/KG)	THV*	DT FV / DZ (*1000)
0	876.	2.2	-6.8	2.6	286.4	
92.	866.	J.		1.9	285.C	-16.1
243.	850.	-1.3	-11.3	1.9	285.1	1-1
1073.	765.	-8.9		1.6	285.€	
1489.	725.	-12.9	-15.3	1.6	285.6	٠.
16EC.	709.	-13.5		1.5	286.8	6.8
1752.	700.	-13.5	-18.5	1.3	287.8	10.9
1993.	678.	-14.3	-25.3		289.4	6.8
3647.	543.	-26.7	-41.7	•2	293.5	2.5
3987.	518.	-29.3	-37.3	.3	294.4	2.5
4233.	500.	-31.1	0	•2	295.2	3.2
HEIGHT	WIND DI	IR WIND	SPEED	Z0/n0		
, u	ונים	י ו				
0	265.1					
243.	270.0			321		
542.	305.1			050		
847.	330.0			316		
1151.	340.0			016		
1456.	360.0			690		
1752.	5.6			713		
2066.	15.0	2 6.7		. 000		
2371.	15.0			200		
2676.	5.5			910		
2980.	10.0			983		
3590.	15.0	-		051		
4773	25.1	11				

2	PRESS	TEMP	DEMPT		MA	THVe	DTHV/DZ
(H)		כב כו	(DES C	_	IGM/KG)	(DEG K)	(+1000)
<b>.</b>	873.	14.4	-1.6		3.9	299.7	
225.	850.	12.8	-9.2		2.2	300.0	1.4
1815.	7CC.				1.3	301.7	1.1
3737.		-16.5	-28.5		.7	334.3	1.3
43 93 •	50C.	-22.3	- 35 • 3		•	305.9	2.5
			. VIRTUAL		FOTENTIAL	TEMPERATURE	<u>u</u>
DATE	TIME	PLACE					
07/03/17	17:00:00						
HEIGHT	WIND DIR	MIND	SPEED	DUZDZ			
Œ	(DE3)	(MPS)		(+10)			
0	2000	7.7		 			
226.	190.0	11.8		.181			
238.	185.0	13.9		1.750			
542.	196.0	12.4		048			
347.	2000	8.2		138			
1151.	200.00	4.6		118			
1456.	225.0	4.1		016			
1761.	235.0	E.7		.085			
1815.	235.0	7.7		.185			
2371.	245.0	13.9		.112			
2980.	245.0	18.5		970.			
3590.	250.0	2€.€		.034			
4793.	260.3	22.7		.026			

2	55586	45.2	LONIC	W.W.	THV*		DIHVIDZ
(H)	(MB)	(0 330)	0 930)	) (GM/KG	1 (056	-	(+1000)
0	ê7E.	4.0	-8-6	2	294	ıa	
194.	850.	()	-11.2		297	88	17.3
232.	846.	11.2	8	•	298	47	17.2
947.	773.	7.2	-22.8	8.	301	6.	4.3
1786.	700.	2.4		*	352	•2	4.
3018.	601.		-24.7	6.	304	6.	2.2
373.	.003	-23.1	-33.1	8.	308	<u>.</u>	0
DATE C8/03/77	TIME 05:00:00	PLASE CC SLC					
HE IGHT	WIND DI (DES)	R KIND S	SPEED	60/0Z (+10)			
6	180.0	9.3					
194.				.237			
238.	185.0	17.5		.318			
542.	195.0			188			
847.	215.0			134			
1151.	240.0			616			
1456.	245.0	9.		693.			
1786.	250.0			9230			
2065.	255.0			.057			
2371.	250.0			.102			
2980.	235.0			.059			
3283.	235.C			•033			

2 PRESS TEMP DEWFT MR THV+ DTHV/D LIGG (M) (ME) (DEC C) (GH/KC) (DEC K) (*1000 2.3 4.1 4.8 4.1 4.8 4.1 4.8 4.1 4.8 4.1 4.8 4.1 4.8 4.1 4.8 4.1 4.8 4.1 4.8 4.1 4.8 4.1 4.8 4.8 4.1 4.8 4.8 4.1 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.8 4.8	RADIOSONDE	DATE	08/03/77	D NIL	17:00:00	L	SCATION SLC	
## 873.   13.2	7 E	SES.	E E	FE	F 6	13 17 KG)	THV*	DTHV/D
# # # # # # # # # # # # # # # # # # #	C	977	1 "	1 2	"		200	
## ## ## ## ## ## ## ## ## ## ## ## ##	116.	861.	1 0	1 1		1 0	2 0	-
7004.9 -34.9 .3 297.1 .5 50011.3 -41.3 .2 3C3.4 E. 50022.5 -52.5 .1 305.6 1. 35.7 17.00.0 S.C. S.C. S.C. S.C. S.C. S.C. S.C.	223.	850.	9 60	-111.			) 47	1
## 59811.3 -41.3 .2 303.4 E. 50022.5 -52.5 .1 305.6 I.	1788.	700.	#	-34.		.3	-	. 6
* YIRTUAL POTENTIAL TEMPERATURE  * YIRTUAL POTENTIAL TEMPERATURE	3036.	598.	11	-41.	3	.2	M	
# VIRTUAL POTENTIAL TEMPERATURE  F. TIME PLACE  F. TIME PLACE  F. T. 17:00:30 SLC  WIND DIR WIND SPEED DU/DZ  F. DEGO C. 2.6  F. DEGO C. 2.1  F. DEGO C. 2.1	4353.	500.	22	-52.	2	.1	w	
TIME PLACE  VIND DIR WIND SPEED DU/DZ  (DEG) (MFS) (+10)  150.0 2.6022  175.0 2.1 .000  165.0 2.6 .016  165.0 2.1 .000  210.0 2.1 .000  250.0 2.1 .000  250.0 2.1 .000  250.0 2.1 .000  250.0 11.8 .025  295.0 11.8 .025  295.0 11.8 .032				VIRT	104	NTIAL	AM I	W
MIND DIR WIND SPEED DU/DZ (DEG) (MFS) (*10) 150.0 2.1022 175.0 2.1 .000 165.0 2.1 .000 210.0 2.1 .000 250.0 2.1 .000 250.0 2.1 .0016 270.0 10.3 .067 295.0 11.8 .025 295.0 11.8 .025	DATE	TIME						
MIND DIR WIND SPEED DU/DZ (DEG) (MFS) (*10) 150.0 2.6 -022 175.0 2.1 -022 160.0 2.6 -016 165.0 2.1 -016 250.0 3.6 -016 270.0 10.3 -045 270.0 10.3 -025 295.0 11.8 -025	08/03/17	17:00:	STS					
150.0 2.6022 175.0 2.1022 175.0 2.1 .000 160.0 2.6 .016 165.0 2.1 .000 210.0 2.1 .000 250.0 3.6 .045 270.0 10.3 .067 290.0 11.8 .025 295.0 11.8 .025	HEIGHT	CONI	CNIM	530	20/00			
150.0 2.6022 175.0 2.1 .000 160.0 2.6 .016 165.0 2.1 .016 210.0 2.1 .000 250.0 3.6 .045 270.0 10.3 .067 290.0 11.8 .025 295.0 11.8 .025	C.W.	-	(MFS)		(+10)			
190.0 2.1022 175.0 2.1 .000 160.0 2.6 .016 165.0 2.1 .000 210.0 2.1 .000 250.0 3.6 .045 270.0 10.3 .067 295.0 11.8 .025 295.0 11.8 .025	U							
175.0 2.1 .000 160.0 2.6 .016 165.0 2.1 .0016 210.0 2.1 .000 250.0 3.6 .045 270.0 10.3 .067 295.0 11.8 .025 295.0 11.8 .025	223.	190.0	2.		()			
160.0 2.6 .016 165.0 2.1 .000 210.0 2.1 .000 250.0 3.6 .045 270.0 10.3 .067 295.0 11.8 .025 295.0 11.8 .025	542.	175.0	2		C			
165.0 2.1016 210.0 2.1 .000 250.0 3.6 .045 270.0 10.3 .067 290.0 11.8 .025 295.0 11.3016 295.0 15.5 .032	847.	160.0	2		()			
210-0 2-1 .000 25C-0 3-6 .045 270-0 1C-3 .045 290-0 11-8 .025 295-0 11-3016 295-0 15-5 .032	1151.	165.0	"		O			
250.0 3.6 .045 270.0 10.3 .067 290.0 11.8 .025 295.0 11.3 -016 295.0 15.5 .032	1456.	210.0	2		C			
270.0 6.2 .045 270.0 10.3 .067 295.0 11.8 .025 295.0 11.3 -016	1788.	250.0	m		C			
270.0 1C.3 .067 295.0 11.8 .025 295.0 11.3016	2371.	270.0	9		()			
295.0 11.8 .025 295.0 11.3016 295.0 15.5 .032	2980.	270.0	10		0			
295.0 11.30 . 295.0 15.5 .0	3590.	290.0	11		C			
. 295.0 15.5 .0	3895.	295.0	11		C			
	4353.	295.0	15		0			

	DTHV/DZ (*1000)	8 8 8 4 4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6			
LICATION SLC	THV.	291.4 292.6 298.1 301.4 302.5 303.2	TEMPERATURE		
:::::::::::::::::::::::::::::::::::::::	MR (CM/KC)	M 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	POTENTIAL	CU/DZ (*10)	1 288 000 000 000 000 000 000 000 000 000
TIME OS:	DEWPT (DEG C)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	* VIRTUAL	SPECO CU	
71/50/60	TEMP (DEG C)	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	PLA 10 51	IR NI	
DATE	PRESS (MB)	866. 829. 774. 705. 538.	TIME	WIND D	146 1165 1175 215 225 235 225 225 225
RADIOSONDE	Z (M)	150. 355. 309. 1736. 2447.	DATE 09/03/77	HE IGHT	150. 238. 238. 242. 1151. 1756. 1761. 2371. 2980. 4313.

O	DTHVZDZ (*10CC)	8 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	lu œ								
CATION SL	THV.	301.8 299.5 300.7 301.3 301.7	TEMPERATURE								
:מם:מם	MS (GM/KG)	111122	POTENTIAL	101+) 20/00 (+10)	105 064	102 033	M O	NU	010	0.55	429
IME 17:0	EWPT EG C)	-6.0 -8.6 -12.4 -16.3	VIRTUAL			-, -,	, ,	•	•	•	
-	EMP CO CO	15.4 12.4 11.3 24.3	PLACE SLS	WIND SPEED (MPS)	5.2	11.8			2.	9 6	!
DATE 09/03/77	PRESS T	856. 850. 800. 700. 500.	TIRE 17:00:00	WIND DIR	30.0 20.0 280.0	270.0	270.0	225.0	215.0	215.0	215.0
RADIOSONDE	(M)	57. 8 561. 8 1646. 7 2770. 6	DATE 09/33/77	HEIGHT (M)	57. 542.	847.	1456.	1761.	2980.	3590.	4213.

RADICSCNDE	:	DATE 10/63/77	TIME OSSECTOR		LCCATION SLC	
	FRESS (MB)	(DEG C)	DEWPT (DEG C)	MR (GM/KG)	THV*	DT FV / CZ (+1000)
1 3	365.	-1.7	-3.9	3.3	283.5	
~	850.	-4.3	-5.5	3.0	282.2	8.6-
-	700.	-15.5	-15.8	1.6	285.6	2.3
-	536.	-30.7	-32.6	.5	289.9	2.1
۵,	524.	-30.1	-34.6	<b>5.</b>	292.5	15.5
-,	. DOS	-31.3	-38.3	٣.	294.9	11.3
			* VIRTUAL	POTENTIAL	* VIRTUAL POTENTIAL TEMPERATURE	щ

	C 10)		2	11	69	03	-	60	00	5	60	128	27
PLASE SLC	WIND SPEED (MPS)	6.7	8.8	. 4	-		17.5	9		2.	9	8	9.6
TIME 05:00:CO	WIND DIR (DEG)	60	350.0	30.	30.	35.	40.	35.	35.	25.	15.	20.	95.
DATE 10/03/77	HE IGHT	6		#	4	15	45	63	16	37	98	3590.	60

( L	P.K. 55	4140	C.	O.	AH!	H
	E 1	1.1		(GM/KC)		*1000
	1		3		87.	
102.	361.	1.0	-13.0	2.1	286.5	-10.1
	5		11.		8E.	-1.2
1722.	C		15.		87.	
1832.	9	14.	9		87.	9.
2642.	N	c)	25.	80.	. 68	2.4
73	H	25.	-1	٠. س	91.	
75	m	.0	35.	4.	95.	
36	N	26.	m	.2	96	
3989.	517.		17	٠.	9	0.0
20	C)	10)	-34.7	*•	1.	
DATE	IZ	PLAS		! -		
20	17	ננ פרכ		40 mm	210	IAL LUMPERATURE
1 14	UN	1 23	1 0	10		
(%)	(620)	(MPS)	÷	0		
Ö	40.	12.				
207.	30.	14.	•	1.		
238.	325.0	14		161		
4	25.	17.	•	0		
#	25.	18.	•	6		
15	30.	17.	•	+4		
45	45.	16.		5		
1	60	74.	•	3		
37	0	12.	•	5		
8	5	15.		5		
29	90.	113	•	40		
00		7.	•	a		
4199.	000	9	•	17		
0				1		

	CT FV / DZ (+1000)		1.5		1.7		2	1.2	5.3	.5	9.	
	C+10		•	-		6.1	-	1.4	u,	2.5		
LCCATION SLC	THV*	282.2	283.7	285.1	287.3	289.0	291.0	292.9	296.2	299.0	301.5	TOMPERATURE
	rs (SM/KS)	2.8	2.1	1.7	1.4	1.2	1.0	<u>د</u>		۳.	2.	POTENTIAL
TIME OSTOCICE	COES C)	-6.1	-9.7	-13.3	-17.6	-23.5	-22.8	-29.1	-52.1	-37.1	E-04-	IAITETV
DATE 11/03/77	TEMP (DEG C)	-1.7	-2.7	-3.3	-13.9	-18.5	-19.5	-19.1	-22.1	-21.1	-25.9	
	PRESS (MB)	878.	85C.	828.	700.	544.	625.	609	561.	551.	<b>205</b>	
RACICSCNDE	7 ( <del>8</del> )	6	257.	460.	1767.	2383.	2656.	2788.	3415.	3550.	4263.	

	DU/DZ (*10)	1	3	2	M	€90.	J	30	m	N	4	9	CJ	C
PLACE SLC	WIND SPEED (MPS)					5.2								
TIME CS:CO:CC	WIND DIR (DES)		•	:		20.02		5.	6	45.	ن		95.	0
DATE 11/03/17	HE ISHT (M)		S	542.	4	15	45	76	1767.	37	98	59	10	25

	PRESS	TEMP	DENPT	W	THV	DIHVIDZ
(W)		(DEC C)	0 930)	9) (	(DEG K)	(+1000)
° 0	879.	5.6	4.3-	2	289.7	
92.	.638	1.6	-10.4	2.0	286.4	-36.7
270.	85C.	P. •	-11.3		286.2	-1-1
1122.	762.	-7.9	-12.6	1	287.0	1.0
1500.	725.	-10.1	-16.1	-	288.7	
1691.	707.	6.6-	-26.9	9.	290.8	11.3
1727.	700-	-10.1	-40.1		291.3	3
2262.		-12.5	-42.5		294.5	5.1
2737.		-10.1	-40.1	•		17.2
3940.	521.	-15.1	-45.1		311.0	00
4353.	500.		-47.7	•	311.5	1.2
DATE	TIME	PLACE		ALLEGE V. A.	11	1
11/03/17	17:00:00		,		OPE CIENTIAL	IAL IEMPERATUR
HEIGHT	WIND DIR	MIND	SPEED	DU/D2		
<b>.</b>	10	(MPS)		(+10)		
Ö	300.0	6.2				
238.	295.0	5.7		021		
270.	295.0	5.7		000		
542.	310.0	5.5		018		
847.	360.0	9.4		C2C.		
1151.	45.0	4.1		-,016		
1456.	40.0	4.5		.016		
1787.	5.0	4.6		220.		
2066.	2.0	6.2		•057		
2371.	15.0	80 • 57		.118		
2980.	20.0	19.1		.153		
3283.	20.0	26.1		.033		
3590.	10.8	23.1		862.		
				-		

3.4	SS260	(C) DEC (C)	(0 823)	43 (GM/KC)	THV*	10301*)
0	866.	1.9	-6.8	2.6	279.8	
. 44.	350.	-3.5	-3.5	2.4	282.9	21.7
420.	821.	1.3-		2.5	284.1	4.12
-6 SE	767.	-3.5	-15.5	1.5	285.8	3.2
6.11.	705.	-14.7	-21.7	1.0	286.4	0.
1992.	670.	-17.9	-22.3	σ.	286.4	0.
20.85.	662.	-17.0	0.62-	w)	287.3	80
+C1.	635.	-19.5	-35.5	M.	238.9	4.0
325	563.	-26.9	6.75-	۳.	250.3	1.5
781.	531.	-37.5	-34.2	<b>.</b>	230.3	1.4
4103.	.303	-33.5	- 36 - 5	M.	291.8	77

	50/02 (*10)		27	013	01	(1	-1	()	(.1	5	3	9	-	
PLAGE	KIND SPEED (MPS)			1.3				•			-		6	
TIME OS:CO:CD	WIND DIR (DES)	80	23	285.0	50.	40	25.	20.	8	80.	85.	50.	30.	
14/02/77	HEIGHT (M)	ů		542.		-	3	65	90	37	98	3590.	10	

RAULUSUNDE	DAIE 14/	25/11	1 17 5	71-00-00		TCCFLICN STC	
(W)	833 (C	TEMP DEG C)	COEWP	5)	MR GM/KO)	THV*	07 HV/02 (+1000)
	870. 86.	3.8		2 4	2.6	00 4	
196.	950.			, <b>M</b>	1.5	10	1.0
1132.		ů		LD.		3	
1285.		1	-21.	. 1			8.7
1696.		4	5.	1	.7	5	•
1980.		1.	*	2	8.	.0	
2558.		-21.9		6	M)	-	1.4
14		M	-46.	6	1.	291.7	
0 7	F	50	ш				
HEIGHT	WIND DIR	MIND	SPESD	1 1			
C X	DEGI	(MFS)		(+10)			
		3.6				0 42 N 0 3 0 0 0	
190.	340.0	2.5		S			
542.		3.1		-			
847.		3.6		+1			
1151.		4.8		1.)			
1455.		6.7		36			
1696.		7.2		02			
2371.		8 . 3		U			
2980.		11.8		640.	10年代10日		
3590.		14.4		3			
3882		Ü		L			
4147		-		3			

TO CO		JAIL 15/ 13/ 1/	יחיים ממיים דו		LOCALEDNALE	
Z (M)	(AE)	TEWP (DEC C)	DEWPT (DEC C)	MG (GM/KC)	THV*	DTHV/DZ (*1000)
.0	872.	17	-8.7	2.3	283.7	
92.	862.	1	-13.7	1.5	284.5	8.3
208.	850.	-1.1	-19.1	1.0	285.2	5.4
682.	.008	-4.3	-18.3	1.1	236.8	7.4
1727.	700.	-12.3	-21.3	1.0	289.5	2.5
2552.	628.	-19.9	-22.5	1.0	289.5	• 5
2966.	594.	-22.9	-25.9	æ•	290.6	2.1
3505.	552.	-25.3	-34.3	*.	293.8	0.0
4203.	• 30S	-29.9	-33.3		2.96.7	4.1
			VIRTUAL	FOTENTIAL	TEMPERATURE	Z.
DATE	-	TIME PLACE				
	1.					

	DU/DZ (*10)		53	10	640.	03	00	#	()	-4	-	#	4
PLACE SLC	WIND SPEED (MPS)		5.7									1.	
TIME 05:00:00	WIND DIR (DE3)	80	155.0	50.	65	80.	95.	10	3.0	.09	65.	25.	30.
DATE 15/02/77	HE IGHT	•		3	847.	15	45	72	37	24	86	0	25

202. 860. 297. 350. 1748. 700. 2668. 621.	25	4	נחנ		<b>8</b> 2	THV	TEVI
887	-	EG 01	020	(3)	M/KG)	(N SEC)	1000
86 70 70 62		13.6	-1-	-	0.4	1 9	
35	•	-	1	9		50	-13.4
. 62		4.5	-14.	9	1.4	293.1	6
. 62		-9.3	2	3	on •	92	5
	•	-	2.	2	1.0	93	6.
15			0	7	.5	96	•
	•	0		2	1.0	00	3.5
. 50			60	80		63	
DATE 17/03/77	TIME 17:00:00	PLACE					
HEIGHT W	IND DIR	WIND S	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5U/DZ (*10)			
0	30.	3.1		J			
9	10.	3.1		C			
542.	315.0	3.5		C			
847.	10.	5.2		S			
1151.	90.	7.2		9			
1456.	86.	& · &		25			
1847.	85.	8.8		00			
2066.	85.	7.7		4)			
2371.	98.	00		M			
2980.	15.	17.C		2			
3590.	10.	00		-4			
4199.	00	-		()			
4433.	05.	00		CI			

2	553	EMP.	DEWPT	M.R.	THVe	STHVISZ
( <del>x</del> )	(MB) (D	(3 33	(ס פכס)	(GM/KC)	(CEC K)	(*1000)
6	869.		9.4-	3.1	.284.2	
55.	863.	1.6	+8-	2.3	87.	50.5
176.	85C.	2.8		2.1	w	20.5
279.	839.		-13.0	1.7	ത	
927.	772.	1	-	1.3	294.3	5
1724.	700.	-7.3	-22.3	6.	ത	
2818.	- 909	15.	8	9.	297.2	2.4
3092.	584.	17.5	-23.5	1.0	ത	4.1
3637.	#	21.	-	• •	L	7.2
\$ 868.	N	22.	3	3.	10	9.4
3978.	-	23.	0		01	
4253.	0.	25.		۳.	10	7.0
DATE	TIME	PLACE				
16/03/17	05:00:30	SLC				
	WIND DIR	N	PEED DU/DZ	20,		
	9 1	(SAE)	(*)			
0.	140.0	3.1				
176.	170.0	3.1	0.	00		
542.	170.0	5.2	9.	5		
347.	180.0	8.2	0.	98		
1151.	195.0	8.2	••	90		
1456.	205.0	7.7	0.1	.016		
1719.	210.0	M .00	٥.	61		
2371.	220.0	17.3		18		
2980.	215.6	19.1		34		
3590.	230.0	20.1	0.	016		

	07 HV Z0Z (*1000)	-16 -16 -16 -16 -16 -16 -16 -16 -16 -16	Fr.										
CCATION SLC	THV*	2002 2002 2002 2002 2002 2003 2003	TEMPERATURE										
		0.44	COTENTIAL	7 - C 1 - C 2 - C 3 - C	11-1	0.0	M M N	0 0 0	++6	680		-4	7 1
TINE 17:		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	* VIRTUAL	ы 60	SPECD	63 (4 6			• •				2
153/77	1EME (0500)	23.60 23.60 21.01		PLA CL	ON MAN OF		. w a	ω	11.	22.	24.	24.	27.
DATE 18	PPESS (MS)	852. 850. 700. 500.		5. C)	MIND D.	• •	720	110	15.	10	10.	10.	11
RADICSCNDE	(3)	11123 - 12653 - 1425 - 1		0.3	HEISHT (%)		5 5 1	T	to t	0 6	28	53	22

2	PRESS	TEND	DEWPT		13	THV.	DTHV/DZ
(%)	(ME)	בב כו	נסבפ כ	•	(SM/KC)	(SEC K)	(*1CC)
	857.	2.2	-5.6		o. (5)	295.6	
72.	353.	0.4			2.5	290.3	2.5
1618.	700.	-7.7			9.1	294.3	2.2
2373.	673.		-16.3		1.7	294.2	-:1
3565.	543.	-23.7			٠.٠	297.2	2.6
4038.	510.	-26.7	-30.2		9.	298.9	3.5
1133.	50 C.	-28.3			9.	298.6	-2.8
			VIRTUAL	C.	OTENTIAL	TEMPERATURE	JRE
DATE	TIME	PLACE					
17/03/71	:00:	ככ פרכ					
HEIGHT	KHO DNHW	MIND	SFEED	20/00			
Œ	3	(SaW)		(+10)			
6	173.0						
72.	176.6	6.2		.222			
542.	170.0			.587			
847.	176.0			102			
1151.	175.0	3.5		118			
1456.	215.0			033			
1618.	245.0			.031			
2371.		7.2		.C54			
2675.		8.2		.033			
2980.				000			
3283.	300.0	8.2		000.			
3590.				.036			
4177.		*					

7	22.00	45.45	Lando	C. 2.	THV*	(1
( w )	(ME)	(DEC C)		) (CM/KC)	(SEG K)	(*100)
5	856.	1.0	4.5-	3.7	286.3	
34.	857.	9.		2.8	LO	3.2
153.	85 C.	F: -	-6.3	2.8	·	200
624.	300.	T-4-7		2.1	w	
1124.	749.	-8-1	-13.1		w	3.2
.663.	7.00	2	-15.3		•	, r.
1970.	£72.	-13.3	-22.9		29℃.6	7
185.	653.	+	-21.9	1.3	-	
348.	639.	4)			(1	
681.	611.		-23.3	1.0		
.163.	50C.	01	"	.5	3.362	
17/03/77	17:00:	בנ פרכ		• VIRTUAL	101	ENTIAL TEMPERATURE
HEIGHT	1 (		SPEED	70/00		
(¥)	(DES)	(Sak)		(+10)		
9.	I U			1/		
267.	310.0	3.1		112		
542.	5	2		.018		
847.	C			.052		
1151.	CI	1		.056		
1456.	C	3		.052		
1947.	in	63		200.		
2066.	R.	7		13		
2371.	LO	81		.236		
2980.	5	17		.135		
3590.	0	18		.016		
4199.	(1	17		558		

C	DATE 18		w	. 1	SOMPTON SE	0
74 E	PRESS (ME)	10 10 10 10 10 10 10 10 10 10 10 10 10 1	DEWPT (DEG 0)	MS (GM/KG)	Full	07HV/0Z (+1000)
153	866. 353.	1.0	P ()	2.6 2.0	86.	-12.1
91	774.	0 1	-10.5	2.2	# W	
7 0	700.		17.	# ## # ##		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
61	540.	1.	3.	*.		
00	525.		0	•2	ċ	0:
11	.003	-	-45.9	•1	+	. 1
DATE 18/03/77	11 ME	FLACE 35 SLC				
HEIGHT	10	1 2	PEED	20/00		
Œ	(DEC)	a I		10)		
<b>.</b>	90.					
168.	95.		•	125		
542	95.	2	•	0		
15	295-6	11.0		970		
1456.	95	0	•	()		
1670.	95.	ů	W. 72	()		
2371.	65.	9.	•	()		
2980.	45.	;		()		
3283.	40.	1.		000		
3590.	50.	5	•	()		
4113.	70.			523		
4199.	70.	'n	* ***	223		

	1	1 1 1 1 1 1 1	1	1	7	֡	
( W )	E33	TEMP (DEC C)	a.	-	7 KC)	THV*	CTHV/02 (*1000)
• • • • • • • • • • • • • • • • • • •	876. 861.	n 4	0,40	0.45		wood	•
27	741.					87.	1 1-
2280.	J t	13				000	0 00 0
3894.	NO	. 6	-33.3	V = 1	. =.	93.	
H	0	-		1	•1	95	
DATE 18/03/77	TIME 17:CO:C	o. ca					
HEIGHT (M)	WIND DIR	N C	23326	199			
0	40						
a	50			()			
233.	265.0	5.7		200.			
E	65.			100			
15	75.			10			
4	65.	3.		11			
C	75.	1		0			
37	90.			23			
80	50.	63		0			
29	10.	+		-1			
2895	15.	0		+4			
11	10.	00		LI			

RADICSCNDE		DATE 21/03/77	TIME DS:CC:DC		LCCATION SLC	
n <b>£</b>	PRESS (MB)	15%P (DES 0)	10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MR (GM/KC)	THV*	CT FV/DZ (*1000)
.0	875.	1.3	-5.0	3.0	285.4	
£4.	868.	3.0	-7.0	2.6	288.0	41.7
239.	950.	1.4	-7.6	2.5	288.1	• 2
1765.	700.	-11.7	-14.0	1.8	289.9	1.2
2675.	621.	-18.3	-18.9	1.4	231.6	1.9
2745.	615.	-17.3	-17.3	1.6	294.3	38.1
2 950.	5 38.	-16.1	-23.1	1.0	298.3	17.9
3300.	570.	-17.3	-29.3	9.	300.6	7.5
4293.	500.	-21.5	-33.5	<b>5</b>	306.9	8.4
			* VIRTUAL	POTENTIAL	TEMPERATURE	

	00/02 (+10)	90	10 4	.220	4 4	01	00 3	0
PLACE SLC	WIND SPEED	₩ H		500		2	. 8	
11ME 05:00:30	WIND DIR (DEC)	13C.0 355.0	25.	15.	55.	22	30.	25.
DATE 21/03/77	HEIGHT (M)	239.	\$ B	1151.	76	6	53	29

:	. 1		Li	ar X	THV*	THVO
( % )	(iwE)	נס מו		1 (62	CEC KI	(*1000)
.0				2	95	
260.	5		0	c	93.	-7.9
1529.	727.	1.4-	-11.7	1.2	294.5	00
œ	0		3	1.	96	
1979.	00	ů	7	1.	.72	4.3
-	-		-	•	98.	
œ	-	-	-18.7	1.	נני	
(7)	6	-13.3	0	•	01.	
(1	C	ن	-50.5	•	308.1	•
DATE 21/03/77	TIME 17:00:	PLAC CC SLC	L.J			
HE JOHT	WIND DI	CAPS)	SFCED			
0	1 0					
266.	50.05	.3		+1		
#	10	2.		-1		
4	30			4		
15	0			.033		
45	41	. 4		1		
1751.	85	. 80		-		
81	30	æ		-		
37	000	11.		S		
98		14.		4		
53	13	13.		. 1		
70				(		

(2)

2	1 10						
	200	1				* \ H \	/HA
(%)	2	(0 530)	(0 010)	2	M/KC)		1000
•	875.	u	7 7 -			84.	
104.	864.					91.	711.7
235.	85 C.	4.0	-7.6		2.5	292.3	
724.	8.00.					96	
1801.	700.		4		•	85	
2689.	625.	1-6-	6		•2	22	
2838.	613.		10		<b>0</b> 1	52.	2.00
3261.	580.				.1	90	
3366.	572.	-13.9	3		۵۱ •	54.	
3565.	557.	-14.3	-31.3		5.	90	
4383.	500.	-19.7	-35.7		₹.	00	•
	TIME	PLAC	L		VIRTUAL	POTENITAL	THERATURE
22/03/17		כם פרכ					
HEIGHT	H	10	GPEED D	Zd/n			
(H)		(Sak		*110			
0				!			
235.	155.0	6.2		.043			
542.			•	.01			
847.				63			
1151.				990			
1456.				10)			
1751.				LO			
1801.				.375			
2371.		()		S			
2980.				14			
3590.		15.5		690.			
4199.		8		#			
4383.		8		000			

RACACACA								
N E	PRESS (MS)	11 ( )6	0 0 0	COTO	F 6	(6%/K6)	THV*	CT FV ZD (*1000
0	371.	1	1 -		3		8 0	
97.	861.	1	4	-7.		2.6	301.0	-26.
204.	850.	7	+		n		01.	
1794.	700.	,	+	7	<b>(*)</b>	1.4	17	<b>.</b>
4383.	500.	-2		3	3	.5	8 3	2.
				* VIRT	RTUAL	POTENTIAL	TEMPERATUR	URE
-	++	3:	FLAC	CL				
CI	0	0:00	313					
HEIGHT	NON	910	H	SPEED	15			
Ξ	936)	_	(MPS)		(+1)	- 10		
0	1 00		2.1					
204.	00				()	5 +		
542.	01				()	62		
347.	9				CI	9		
1151.	8				1	3		
1456.	00				(_)	L)		
1794.	0				1.1	*		
2371.	00					9		
2980.	40				()	1		
3590.	9				C	25		
3895 .	260	0.	8.2			16		
4787	-		•			1.2		

(2)

(3) (3) 154.8	PRESS (ME)	TEMP	Tanic	2.	T HV*	
		LJ	(356 51	(GM/KG)	C	(*1500)
	856.	5.5	4-5-	2.9	291.0	
	35C.	10.4		2.2	297.4	41.9
	.00.	2.0	-16.0	1.6	305.2	4.7
	585.	-15.7	-23.7	1.0		
	.003	-23.3	-35.3	7.	308.4	1.9
			* VIRTUAL	AL POTENTIAL	L TEMPERATURE	IRE
EATE 23/03/77	TIPE S:00:3	PLACE C SLO	ы			
HEIGHT	WIND DIR	GNIM	SPEED	20/00		
(X)	(DEG)	(MFS)		(*10)		
0	160.0	6.7				
154.	160.0	7.2		.032		
542.	165.0	7.7				
847.	175.0	12.4		.154		
1151.	185.0	13.9	-	640.		
1456.	200.0	10.8	•			
1746.	215.0	6.3		522		
2566.	225.2	8.3	•			
2371.	230.0			.016		
2675.	230.0	•		036		
2980.	225.0			•€36		
3590.	210,0	12.4		.051		
4343.	22C.C	11.8		830.		

RADIOSONDE	DATE	23/03/17	1145	17:00:0	. 1	SCATION SE	0	
7	85.29	TIME	C.	1	× ×	THV*	CANTO	2
(22)	(ME)	וסבנ כו	נטנט	0) (0	CM/KC)	CE O KI	(*1000	-
6	858.	1 +1	1 0		1.3	15		
80.	855.		-		1.9	90	-17.0	
16 25 .	700.	2			1.5	U		
3905.	533.	3	5		6.	50		
42.93.	.203			co.	₹.	5.935	4.2	
			· VIRTUAL	104	ENTIAL	TEMPERATURE		
DATE	TIME	OLAS	Į,					
23/03/17	17:50:1	בנ פרפ						
HEIGHT	WIND DIE	NIM	SFEED	23/03				
(#)	DEG	(MPS)		(+10)				
Ö	ı m	12.4						
. 28	(n)	12.4		()				
542.	ത	3		01				
847.	C	3		()				
1151.	C	9		0				
1456 .	0	5		N				
1595.	9	9		11				
2371.	01	4)		1)				
2980.	195.3	17.0		.225				
. 385z	O	å		(1				
3395.	σ	1.		m				
4293.	H	0		3				

RADICSCNDE	DATE	24/03/17	الي	מפיריים		)	
2 <del>(</del> )	FRESS	4 E K F C C C C C C C C C C C C C C C C C C	0000	0)	MR 04/Ke)		DT FV/DZ (*1000)
ď	364.	3.3	1.7		5.0	289.7	
1425.	850.		2		4.4	287.8	-1.3
1913.	800.		-3.0	-	3.8	9	3.7
2963.	700.	ů	-7.8	-	3.5	S	5.5
1194.	679.		-7.8	•	3.1	0	11.3
1391.	582.	4	-16.1		01	N	3.4
:520.	.003	-23.1	-25.5		1.0	305.1	2.6
DATE 24/03/77	11PE 05:00:30	FLACE 30 SLS	щ				
HEISHT (M)	WIND DIR	MIND	SPCED	50/JQ			
		,					
	2000			000			
138.	330.00	0		200			
847	440.0			22.5			
1151.	335.0			086			
1456.	325.0			066			
1676.	275.0			050			
2066.	210.0			.105			
2371.	205.0			.138			
2980.	220.0			.084			
3590.	230.0			.051			
4233.	230.0			400.			

	9THV/9Z (*1CD0)		-22.1	5	3.2	1.7	4.5	2.1	3.3	
LOCATION SLO	THV* (DC6 K)	294.4	251.9	291.7	292.4	292.7	295.9	301.5	303.9	TEMPERATURE
	10 M/4 C)	4.5	4.1	4.2	2.3	4.1	3.2	1.5	1.0	POTENTIAL
TIME 17:00:DD	OTWPT (DES C)	•2	-1.2	-1.7	-6.3	-2.8	-7.1	-19.6	-25.1	VIRTUAL
DATE 24/03/77	TEMP (DEC C)	a) C1	8.4	3.	0	-2.7	-5.5	-19.3	-24.1	
	PACSS (MB)	8E2.	850.	836.	784.	765.	700.	. 25°	200	
RADIOSONDE	( W )	ů			757.					

7	DESS.		ā .	OF No		× ×	THV	DIHANDS
(%)	(ME)	10	0 0			(C%/KC)	(X) DEGI	(+1000
.0	856.		P. E	•	#	9.4	288.1	
61.	850.		0.	•	n	4.2	286.3	-19.2
546.	.009	•	2.5	-3.	2	3.7	288.2	4.7
.965	700.	- B . S.	6.7	-8.3	*	2.3	294.2	4.3
3362.	555.	-1	6.8	-20	•	1.4	301.1	7.9
				VIRTUAL		POTENTIAL	TEMPERATURE	JRE
DATE	TIME	EJ.	PLACE					
25/03/77	05:0	5:00:00	376					
HEIGHT	WIND DIR	DIR	NIND SPEED	PEED	DU/DZ	20		
(¥)	(DES)		(MPS)		(•1	6		
ő	140	0	3.1					
61.	180°C	0.	2.1			33		
542.	345	0.	3.1		0.			
847.	355	0.	2.6		0.1			
1151.	360	0.	2.1		0			
1456.	10	0.	1.5		0			
1596.	20.	0.	1.5		50.			
2371.	15	0.			013			
2980.	210	0.	6.2					
3590.	180	0.	10.8		0	32		
3895.	175	0.	10.8			30		
4777	101	c	0		-	0		

0	DATE		7	1.1	17:00:	1 00	COATE	c;
(R) 2	PRESS (YE)	754P (DEC	5	010	) (0	YP. GR/KC)	13V+ (N 0 10)	5THV/52 (+15G0)
ů.	1 10	5	#	•			55	
142.	850.	•	00		2	2.8	287.5	
(1	4		Ø1	O'			60	
66	0			10			91.	
50	0			"		•	92.	•
36	M		7	-24.			93.	
4)	623.	-16.		13	+		94.	
8	6	-18.		-23.	*		95.	
4	O	-		-31.	1		-66	
13	1	-	1		-			
(M)	(OEG)	3 <b>-</b>	MFS)	SFEED	(*10)			
	10		1		1	•		
	2 6	. c	1.1					
24.7	10.	) C	2 1					
*	61				503			
15	40				03			
5	335.	0			25			
58	45	c			02			
90	40	0	•		13			
37	23	0			40			
98	80				1			
23	55				2			
50	w				13			
1.	U		,		~			

				-			
(H)	PRESS	TEMP DEG C)	S A S C C C C C C C C C C C C C C C C C	F 6		THV*	DT HV / DZ (*1000)
	863.	7	8 1	7		1 00	
117.	850.		-1	6		83.	0
943.	766.	0	.:	5		83.	
1616.	700.	-16.5	9	4		284.5	
2331.	636.	2.		2		85.	
2773.	.009			•	9.	86.	
2 996.	592.	7.		9	۳.	88	
O	. 20C		-43	1	•5		
				-	!		
HE IGHT (M)	NIND DI	R WIND	SPEED	6.101 (*101	2		
0	100	4 41					
117.	290.0	16.0		.13	7		
542.	00	15.5			~		
847.	95.	16.5		333.			
1151.	35.	16.5		C	•		
1456.	50	16.0		L	44		
1621.	10.	15.5		030	•		
2371.	25.	11,3		556	44		
2980.	25.	17.0		20.			
3590.	25.	12.9			(,)		
4043.	35.	1.3		+24.			
4100	75	14.0		6			

RADICSCNDE	DATE 28	11/23/	TIME	17:00:00	27	CCATION SL	O
11		TEMP	C. N.			THV	DY FV Z
(#)		41 1	0 i	(5%/KS	(3)	(X 010)	*100
•	365.		_	2	7	m	
126.	850.	11	51	2.	**	a	-15.7
1639.	100.	15	16.	-1		35.	1.1
2650.	£12.	4	+		α)	8E.	•
3687.	531.	-32.9	35	•	<b>M</b> )	238.0	1.9
4673.	.202	w	0		7	88.	01
			* VIRTU	TUAL POTEN	TIAL	TEMPERATURE	RE
DATE	TIME	PLAS	La)				
28/03/77	17:00:0	370	100				
HEIGHT	WIND DIR	N H R	SFEED	20/03			
3	(020)	(SJK)		(*10)			
0	10	4					
136.	345.0	5.2		00			
M	25.	5.7		3			
#	10.	7.7		5			
#	50.	8.2		1			
5	85.	7.7	7	++			
5	75.	3.2		0			
M	75.	8.8		5			
-	85.	6.7		(1)			
2980.		6.7		223.			
8	85.	6.2		5			
O	. 33	5.2		5			
4073.	35.	7.7		ru			
The state of the s							

() 	0 (*1666)	4	7 -14.3		6.		9 1.4	ATURE
בפסאנדפא פרם	THV*	282.4	285.	282.7	282.9	284.5	287.9	TEMPER
	MR (CM/KG)	3.5	2.1	1.2	2.0	1.5	•5	POTENTIAL TENPERATURE
TIME OSSESSES	07497	-5.1	9-9-	-10.5	-12.3	-16.6	7.04-	* VIRTUAL
RADIOSONDE DATE 297. STIT	דבאף נסבים כו	-2.9	-5-7	-8-3	-12.3	-16.5	-37.1	
DE DATE	PRESS	863.	850.	80C.	756.	700.	200	
RADIOSON	Z (W)	G.	123.	589.	1014.	1617.	4043.	

	191+) 20/02 (+10)		00	-	10	643-	13	10	()	23	-	-
PLACE SLC	WIND SPEED I		3.1	7.7	13.8			•		M. 01		
TIME 05:00:30	WIND DIR	60.	85.	76.	75.	280.0	.06	95	10.	25.	20.	15.
DATE 29/03/77	HEISHF (M)	0	123.	542.	847.	1151.	45	61	37	2980.	59	5

RADICSCNDE	CATE 29/	5777	t.J ≥	17:00:00		CCATION SEC	
H &	E35	TERF DE3 C)	0.530	X 80 0	MR M/Ke)	THV*	57 HV/ (+100
1 4 5	50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00	1 4 4 3	1 600	0.00	w + c	86.	
1773. 1873. 2302.		1 ~ ~ ~	74.			287.2 287.2 287.2	 
54	85. 42. 00.	40101	200			89. 97.	
DATE 29/03/77 HEIGHT	TIME 17:00:00 MIND DIR (DEG)	PLACE SLC SLC WEND S	0	50/02	- 125		
143.	85.	1		1 30			
6413	95.			20 17 21 17			
2571. 2576. 2380. 3590.		8 M 8 M M M M M M M M M M M M M M M M M		030000000000000000000000000000000000000			
	50.	0		0 1			

	32		10	3		1	2		m	0	o.
	ETFV/BZ (*1000)			7.3	3.6	7.7	6	2.	1.	3.0	. 4
LCCATION SLO	THV*	281.8	281.2	282.0	282.6	285.3	286.5	286.7	288€	289.5	295.2
	MR (64/K3)	3.1	3.2	3.2	2.6	1.8	11.5	1.4	1.0	• 5	m.
TIME OS:CC:CC	12WPT (0.020)	-4.5	-# · 4	14.01	-7.6	-14.3	-16.1	-17.5	-22.5	-29.7	-38.1
DATE 36/03/77	TEMF (DEG 3)	-2.3	- 4-	5.4-	0.41	-14.3	-14.7	-15.5	-21.1	-24.7	-31.1
	PRESS (MB)	870.	86C.	850.	827.	710.	.007	6 90 •	629.	586.	500.
RADICSCNDE	7.6	.0	91.	185.	398.	1568.	1686.	1792.	2466.	2991.	4143.

		* VIRTUAL	UAL FOTENTIAL	TEMPERATURE
DATE 3C/03/77	TIME US: CO: CC	PLACE		
HE IGHT (M)	WIND DIR (DES)	WIND SPEED (MPS)	CU/DZ (*10)	
	190.0	2.1		
185.	160.0	1.5	032	
542.		10.01	31	
947.		9.4	99	
1151.		4.01	00	
1456.		9	0000	
69		5.7	.048	
76		1	222.	
37		6.2	80	
98		1	803.	
3283.	240.0	5.7	033	
53		3.6	068	
4143.		2.0	018	

0	DTHV/DZ (*1060)		-8.9	1.5		6.	7.8	11.2	10	RE
LOCATION SLC	THV*	291.0	289.2	291.5	292.9	293.2	234.4	2962	299.1	TEMPERATURE
	MS (CM/KC)	P)	1.9	1.2	1.1	5.	.5	<b>M</b> )	• 5	POTENTIAL
TIME 17:00:00	DEWPT (DEG C)	0.4-	-11.4	-18.1	-21.9	-24.6	-31.7	-36.7	-39.9	* VIRTUAL
DATE 30/03/77	TEMP (DEG C)	6.0	2.6	-10.1	-21.3	-23.3	-23.7	-23.7	-27.9	
	PRESS (MB)	871.	850.	700.	591.	573.	561.	549.	.003	
RADIOSONDE	Z (M)	6	193.	1735.	3049.	3281.	3438.	35 99.	4233.	

	00/02		M	10	.23	50	30	5	000.	41	0	11	()
FLACE	CEERS GNIM			.1	7				5.2		2		60
7:01	WIND DIR (DEC)	5	0	4)	5	. 23	25.	40.	145.0	55.	80.	85.	00
0	HEISHT (M)	0	6	#	#	15	45	-	1751.	37	98	5	23

RADIOSONDE	DATE	31/03/17	TIME SS:CO:CO		LOCATION SEC	
7 KB	PRESS (MB)	TEMP (DEG C)	DIWPT (DEG C)	MR (CM/KG)	THV*	DTHV/DZ (+1000)
0	869.	9.	-5.4	2.9	285.5	
175.	850.	2.6	-12.4	1.1	289.2	21.1
210.	748.	-5.5	-17.5	1.3	291.1	1.8
711.	700.	6*6-	-15.9	1.6	291.8	1.5
102.	665.	-13.3	-18.3	1.4	292.3	1.1
815.	605.	-19.9	-26.9		292.5	*
3231.	572.	-22.9	-37.9	.2	293.7	2.7
203.	500.	-31.5	-61.5		294.6	1.0

\* VIRTUAL POTENTIAL TEMPERATURE

	00/02 (+10)		0	H	.033	41	10	T)	08	5	-	C	5
200	WIND SPEED D		3.1					:	3	4)	.0		6
02:00:50	WIND DIP (DEC)	00	110.0	40.	70.	85.	90.	00	05.	.53	15.	10.	25.
31/03/17	HEIGHT (M)	ü	175.	542.	947.	1151.	1456.	1711.	2066.	-	0	2590.	M

	DATE	DATE 31/03/77	TIME 17:00:00		LOCATION SLO	
U. T.	ORESS (ME)	TEMP (SEC 0)	DEWRY (DEG 0)	MR (GM/KG)	THV*	57HV/52 (*1CGD)
	856.	7.8	-4.2	3.2	293.3	
	57.	5.2	-11.0	1.9	291.1	-26.8
-	85C.	4.6	-10.4	2.0	291.3	4.2
-	.00	-10.3	-10.8	2.4	291.5	.1
1.12	38.	-16.3	-16.3	1.7	292.4	1.3
	08.	-19.3	-27.9	9.	292.1	8
	.36	-20.5	-25.9	æ.	293.5	6.3
	575.	-22.1	-52.1	•1	294.1	7.4
		-29.9	6.63	0.	296.6	2.4
:			VIRTUAL	POTENTIAL	TEMPERATURE	

CALCACAC					1111111111	-
	FRESS	TEMP	FUNEC	<u>د</u>	THV	DIFVIDZ
æ	( MB )	(DEG C)	(0 550)	(CM/KS)	(N SEC)	(+1000)
.0	860.	2.2	-6.3	2.7	288.0	
91.	85C.	1.0	-11.0	1.9	287.5	9.4-
153.	843.	9.	-12.4	1.1	287.3	3.4
233.	835.	2.2	-11.8	1.8	295.3	33.2
1080.	749.	-4.9	-14.9	1.6	291.7	1.1
1627.	700.	-10.7	-15.4	1.6	290.9	-1.3
481.	625.	-18.3	-18.3	1.4	291.3	1.0
2984.	584.	-20.5	-20.5	1.3	294.9	6.2
4123.	200	-28.5	-30.0	9	298.4	7.1
			. VIPTUAL	POTENTIAL	TEMPERATURE	<b>3</b>
DATE 01/04/77		TIME PLACE	w			
HEIGHT (M)	WIND DIR	DIR WIND SPEED		1010)		

	DU/DZ (*10)		-	-	-	-	.033	C	0	N	O	-	-	M
PLACE	WIND SPEED						2.9							•
TIME	WIND DIR	30.	50.	85.	35.	50.	250.0	55	55.	45.	.09	70.	70.	65.
DATE 01/04/77	HEIGHT (N)	.0		238.			15	45	62	37	2380.	28	59	12

Z FRESS TEMP DEWFT HR THV* DTHV/DZ  G** 86C** 1.6	RADICSCNDE	CATE C	1164177	TIME	17:00:00	227	STICN SEC	
## 10	2	BES	E .	1 32 (			T H	111
860. 1.6	(E)	Σ 1	ا ا ليا	9 1	-	_	0 10	1 1
## SC.	•	950.	1.6		4.		87.	
7784.5 -6.5 3.0 289.2 4.5 5.1 5.1 295.2 7.1 5.2 5.1 295.2 7.2 5.1 5.2 5.1 5.1 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2	97.	85C.	H	-	7		85.	21.
FOC1C.7 -12.6 2.1 291.0 2.5 2.2 7 1.1 295.2 7.2 2.7 1.1 295.2 7.2 2.7 1.1 295.2 7.2 2.7 1.1 295.2 7.2 2.2 7.2 2.2 2.7 1.1 295.2 7.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2	800.	778.	+		3		89.	4.9
### 256.3 -22.7 1.1 295.2 7.0 200 20.0 20.0 20.0 20.0 20.0 20.0	61	700.	15.	12.	2		91.	2.2
ETIME PLASE  * VIRTUAL POTENTIAL TEMPERATURE  * VIRTUAL POTENTIAL	C3	583.	25.	22.	1		95.	0 ° %
TIME PLACE  /77 17:0C:CC SLC	11	.305	29.	63			96	1.6
TIME PLADE  77 17:00:00 SLC  WIND DIR WIND SPEED DU/OZ  (DED) (MPS) (*10)  240.0 Z.1  255.0 Z.6  335.0 Z.6  355.0 Z.6  35				>	1 0-		EMPERATUR	
MIND DIR WIND SPEED DU/DZ (DED) (MPS) (*10) (DED) (MPS) (*10) 240.0	DATE	THIL		L.J				
WIND DIR WIND SPEED DUZDZ (0E3) (MPS) (*13) 240.0	01/04/17	-	ננ					
240.0 2.1 (95) (95) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10) (*10	HEISHT	DONI	NIN	1 4	cuvez			
6.2 295.0 2.1054054 847. 335.0 2.6 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.1 .000 3.	3	(1)	3:		(+10)			
53. 265.0 2.6054 547. 345.0 2.5 .000 151. 330.0 3.1 .000 456. 335.0 3.1 .000 518. 330.0 3.1 .000 518. 295.0 4.1 .013 590. 295.0 6.2 .000 117. 295.0 6.2 .000	ė	0	7					
547. 345.C 2.5 .000 847. 335.C 2.6 .000 151. 330.0 3.1 .000 456. 335.0 3.1 .000 518. 330.0 3.1 .000 371. 295.C 4.1 .013 590. 295.0 6.2 .000 895. 295.D 6.2 .000		65	2		0			
847. 335.0 2.6 .000 151. 330.0 3.1 .000 618. 330.0 3.1 .000 618. 295.0 4.1 .013 371. 295.0 6.2 .034 590. 295.0 6.2 .000 117. 295.0 6.2 .000		45.	7		()			
151. 330.0 3.1 .016 456. 335.0 3.1 .000 618. 330.0 3.1 .000 371. 295.0 4.1 .013 980. 275.0 6.2 .034 590. 295.0 6.2 .000 117. 295.0 6.2 .000	3	35.	2		C			
456. 335.0 3.1 .000 518. 330.0 3.1 .000 371. 295.0 4.1 .013 980. 275.0 6.2 .034 590. 295.0 6.2 .000 117. 295.0 6.2 .000	1151.	30.	3		LI			
618. 330.0 3.1 .000 371. 295.0 4.1 .013 980. 275.0 6.2 .034 590. 295.0 6.2 .000 895. 295.0 6.2 .000	45	35	2		()			
371. 295.C 4.1 .013 980. 275.0 6.2 .034 590. 295.D 6.2 .000 895. 295.D 6.2 .000 117. 295.D 6.2 .000	61	30.	2		U			
980. 275.3 6.2 .0 590. 295.0 6.2 .0 895. 295.0 6.2 .0	37	95	3		()			
895. 295.0 6.2 .0 895. 295.0 6.2 .0 113. 295.0 6.2	98	75.	9		()			
895. 295.0 6.2 .C	59	95.	9		(1)			
113. 295.C 6.2 .C	83	95.	9		200.			
	11	95	w		0000			

7	RESS	W	L	2	-		FVVD
( <del>,</del>	8) (5	EG 21	0 9261	(SM/KG)	X 02C) (0		(*1000)
0.	876.	۵	7.7-	3	294.	6	
55.	87.5.		-7.0	2	286.	<b>c</b> n	in
245.	850.	1.6		8.8	283.	4	17.5
722.	.008	7.		2	291.		
1685.		•	-8.4	Cı	293.		
1785.		•	-9.8	2	294.		5
1 906.		-7.3		2	296.		
2442.				(1)	299.		4.
2535.		0	-15.5	-1	300.		
3005	•			1	303.		•
<b>4363</b>	•				311.		
	! "		1				
CM)	(DEC)	(MFS)	SPEED	(*10)			
0	65.	4.1					
245.	60.	3.0		220			
542.	000	2.1		5			
847.	30.	2.6		01			
1151.	05.	4.6		90			
1456.	15.	6.2		53			
1785.	325.0	8.2		.061			
2371.	25.	()		m			
2980.		-4		+1			
3590.	355.0	18.5		.118			
1757		1					

RACICSCNDE	CATE	CATE C4/C4/77	TIME 17:00:00		LCCATION SLC	O
	PPESS (MB)	TEMP (DEG 0)	00KPT	(8%/%S)	THV*	CT FV / DZ- (*1000)
	977.	12.8	-2.2	3.7	297.6	
	85C.	3.6	4.4-	3.2	295.7	6.3-
	700.	-5.1	-10.1	2.5	297.3	1.0
	£78.	-6.9	-10.5	2.5	298.2	2.8
3069.	598.	-5.9	-20.3	1.2	308.7	12.3
	.003	-15.9	6.83-		313.8	2 • 8
			* VIRTUAL	* VISTUAL FOTENTIAL TEMPERATURE	TEMPERATU	35

13

DATE 04/04/77	HE IGHT	ė	4	#	847.	15	45	9	828	371	98	530	43
TIME 17:00:00	WIND DIR (DES)	30.	15.	40.	295.5	80.	000	85.	95.	15.	35	25.	25.
PLACE	WIND STEED (MRS)				1.5						7		
	DU/52 (*10)		17)	50	520	10	w	+1	-	m	5	10	+1

7		TEMP	U	2	THV	TEVZ
(K)	( MB )	(DES D)	(0.636)	(SM/KG)		(+1300)
0.	377.	9.9	3	4.2	291.2	
93.	867.	7.4		3.4	292.9	17.6
259.	850.	7.5	5	3.1	294.0	
	834.	7.0	5.9-	2.9	295.6	
1826.	730.	-4.1	-	3.2	238.5	2
2240.	664.	-7.1	40	3.1	259.7	2.8
2563.	637.	-8.9	M	2.2	301.0	
3221.	SPE.	-15.5	10	6.1	355.7	
3326.	577.			1.9	301.9	11.2
3352.	£75.	-15.1	(1	1.3	302.6	25.3
3484.	555.	-	-		306.5	
4403.	.008		-28.5		3.10.6	*
	H	PLAC	\	. VIRTUAL	POTENTIAL	TEMPERATURE
77/00/30		נט				
HEIGHT	12	NIM B	STEED DU/DZ	20.		
3	(923)	(MPS)	(*1	.01		
6	30					
259.			3	61		
542.	35	1.3		14		
847.	10.	•		53.		
1151.		2		500		
1456.	55.	4		116		
1761.	50.	S.		.52		
1826.	50.	9	•	.54		
2371.	55.	6	• 398 5	157		
2980.	55.	1		33		
3590.	40.	1	•	010		
		•				

C LCCATION SLC	MR THV* DTFV/DZ M/KG) (DEG K) (*1000)	4.3 302.9		3.5 300.2 2.2	2.2 3CC.E .2	1.8 300.7 .5	0	.9 354.8 15.0	7	
TIME 17:00:00	DEWPT MR ) (DES C) (GM/KO)	2 4.3					-18.9 1.3			
E DATE CS/C4/77	PRESS TEMF (MB) (DEC C)	877. 17.8					£713.9			
RACICSCNDE	7 (%)	D	.77.	263.	1854.	2117.	21.85.	2458.	3653.	

	20/00 (*10)		CI	14	m	13	0	M	m	1	.551	C
PLACE SLC	WIND SPEED										5.2	
17:00:71	WIND DIE (DEC)	E.C.	0	30.	. 36	75.	000	40.	30.	15.	10.0	0
		0	9	3	3	15	45	85	37	80	3595.	4.

215 P	* CTHV/DZ K) (*1000)			
LCCATICN	1 HV*			
נכנכ	88 (34783)	440004	20/70Z	0118 0118 0116 0110 0110 0110
TIPE OS:	CEWPT (010)	111111111111111111111111111111111111111	EED	
7774	EWF (0)	300 C 1 1 M 0 C 1 1 M 0 C 1 1 M 0 C 1 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C 1 M 0 C	PLACE SLC NIND S	4 W 4 4 W 4 W W 4 W W W W W W W W W W W
DATE CEZCH	PRESS T	8872. 8719. 7119. 532. 500.	JINE 35:00:33 WIND DIR (DEG)	130.0 165.0 176.0 176.0 200.0 240.0 320.0 255.0
RADICSCNDE	2 (H)	66. 273. 764. 1622. 1854. 2050. 2593.	DATE 06/04/77 HEIGHT	273. 242. 842. 1151. 1856. 1856. 2371. 2980. 3590.

.,	PRESS T	Li	L'AL		S. H.	THV*	STHYZ
(H)		(0 03)	( )=3	6	(CM/KC)	(3 55 K)	(+1000)
ė	877.	1		+		90	
97.	867.	18.5		()		5	-29.6
272.	850.	15.4	-5.	9	3.0	303.9	1
1878.	700.	œ.		2		53	0
2850.	620.			2		30	
3161.	596.	0.01		6	Ø1 •	2	
3307.	585.			6	•2	80	
4483.	- •339	18.9	-48	on		10	**
					!		
HE IGHT (M)	WIND DIR	(MPS)	SFEED	DU/DZ (+10)			
:	50.	3.1					
272.	355.0	3.€		4			
542.	55.	3.1		013			
847.	45.			5			
1151.	10.			w			
1456.	40	•		14)			
1878.	55.			6			
2066.	.39			CA			
2371.	55.			35			
2980.	.39			()			
3590.	50.			-			
1.001				1			

2	FRESS	TEMP	DENET	9:	THV.	CYNY
CH)	( WB )	(DE8 C)	(0 020)	(GM/KS)	C) ES K)	(*1000)
•	877.		80.	4.1	291.3	
48.	872.	4.00	-4.5	3.1	793.4	32.4
115.	865.		7.4-	3.2	298.4	
266.	855.	12.4	-5.6	3.0	299.7	
393.	337.		-6.3	2.9	301.6	15.7
754.	PDC.		-8-1	2.€		
1134.	753.		-10.2	2.3	305.1	4
1871.	700.	2.2	-13.8	1.9		
2210.	670.		-15.1	1.8		*
32 90 .	583.		-14.6	2.1	306.9	
4166.	520.	-	-23.3	9.		
4473.	5000	0	-33.7	4.		1.7
DATE C7/04/77	TIME	TE PLACE	ы	. VIRTUAL	POTENTIAL	TEMPERATURE
HEIGHT	WIND D	IR WIN	SPECO DU	ZQ/ng		
(H)	en 1	-		*10)		
6	10	2				
266.	25.	3	•	2		
542.	55.	2 0	•	-		
847.	180.	0 4.1		540		
1151.	00	0 3.	•	M		
1456.	25.	2 0		I		
1971.	25.	3.		N		
2371.	45	5.		W		
2676.	45.	0		5 70		
2980.	50.	0 7.		W)		
3590.	.5	9.3		M		
	-					

	J - 7					
(8)	0 (B)	7249 (DE3 C)	DEWPT (DEG C)	MR (CM/KC)	THV*	DTHV/DZ (*1000)
0.	875.	2			. 8	
255.	850.	19.3	0.4-	3.3		-4.3
1878.	70C.		M	•	7.	·•
3250.	535.	-8.1	-21.1			• 2
4168.	0		N			
4417.	503.	8	-30.1	<b>.</b>	309.5	2.5
44 93 .	U	01	61		91	•
HE I GHT	33	R WIND	SPEED PL			
0	50.					
255.	345.0	4.6	i	9		
542.	85.		i	05		
847.	40.			1		
1151.	35.			. 1		
1456.	25.			2		
1378.	20.			5		
2371.	30.	9.3		223		
2980-	45.			12		
3590.	50	ü		14		
4493.	55	14.3		3		

RADIOSONDE		DATE 08/04/77	TIME DESDESO		LOCATION SLO	
2 (%)	PRESS (MB)	TEMP (DEC C)	DEWPT (DEG C)	MR (GM/KG)	THV. (DEG K)	DTHV/02 (*1000)
9.	874.	11.6	-2.4	3.7	296.6	
233.	950.	14.8	-5.2	3.1	302.2	23.5
3 90.	835.	16.0	-6.3	2.9	305.0	18.4
1 355.	700.	5.0	-14.0	1.8	308.4	2.3
2623.	636.	-2.1	-16.1	1.7	308.8	9.
3597.	562.	-11.5	-13.5	1.6	308.8	r.•
4306.	512.	-18.9	-19.2	1.6	308.2	6
4473.	.003	-18.3	-32.3	.5	310.8	15.7
			* VIRTUAL	POTENTIAL	POTENTIAL TEMPERATURE	3 E

	101+) 20/00 (+10)		34	20	11	50	3	[]	2	.019	#	22	0
PLACE	WIND SPEED				•					11.8			
TIME 05:00:00	WIND DIR	35.	70.	65.	70.	75.	85.	30.	30.	225.0	35.	35.	15.
DATE D8/04/77	HEIGHT (M)	0	M	M	#	#	15	45	85	2371.	99	50	47

2 <b>T</b> C	CT FV ZDZ (*1500)	314 m	ក បក ក	
LCCATION	THV*	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1	
33:33	PR (GM/KS)	C (A 44 44 C) & W W W W W W W W W W W W W W W W W W	POTENTIA  702 101	 
TIPE 17:	1 0 5 5 C )	411111	* VIRTUAL SPECD BU	
FF14318	TEMP (DES 0)	00000000000000000000000000000000000000	S S S S S S S S S S S S S S S S S S S	M
CATE 0	FRESS (MB)	2000 2000 2000 2000	TIPE 17:00: WIND DI	H H H H H H H H H H H H H H H H H H H
EADICS CNDE	(M)	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	08/04/77 11/04/77	

## APPENDIX E

## REFERENCES

- 1. Turner, Bruce D., "A Diffusion Model for an Urban Area," <u>Journal of Applied Meteorology</u>, Volume 3, page 83-91, 1964.
- 2. Panofsky, H.A. and B. Prasad, "Similarity Theories and Diffusion," Int. J. Air Wat. Poll., Volume 9, page 419-430, 1965.
- 3. Businger, Joost A., "Turbulent Transfer in the Atmosphere Surface Layer," <u>Workshop on Micrometeorology</u>, American Meteorological Society, page 67-100, 1973.
- 4. Panofsky, H.A., et al, The Characteristics of Turbulent Velocity Components in the Surface Layer Under Convective Conditions, <u>Boundary Layer Meteorology</u>, Volume II, No. 3, page 335, 1977.
- 5. U.S. Army Dugway Proving Ground, Dugway, Utah, <u>A Statistical Method of Calculating Turbulence Values for the Pasquill Stability Categories</u>, Albert W. Waldron, 1977.
- 6. Lettau, H.H. and Ben Davidson, <u>Exploring the Atmosphere's First Mile</u>, Volume II, Pergamon Press, 1957.
- 7. Air Force Cambridge Research Laboratories, Badford, Massachusetts, Kansas 1968 Field Program Data Report, Yutaka Izumi, Editor, 1971.
- 8. Commonwealth Scientific and Industrial Research Organization, Australia, The Wangara Experiment: Boundary Layer Data, by R.H. Clarke, et al, 1971.
- 9. U.S. Army Electronics Command, Atmospheric Science Laboratory, White Sands Missile Range, New Mexico, <u>Turbulence Measurements from a T-Array of Meteorological Sensors</u>, Armendariz, Manuel, et al, 1971.
- 10. Air Force Cambridge Research Laboratories, Hanscom Air Force Base, Massachusetts, Minnesota 1973 Atmospheric Boundary Layer Experiment Data Report, 1976.
- 11. Lumley, J.L. and H.A. Panofsky, <u>The Structure of Atmospheric Turbulence</u>, Interscience Publishers, 1961.
- 12. Willis, G.E. and J.W. Deardorff, "A Laboratory Model of the Unstable Planetary Boundary Layer," <u>Journal of the Atmospheric Sciences</u>, Volume 31, page 1297-1307, 1974.
- 13. U.S. Army Materiel Development and Readiness Command, Arlington, VA., Handbook for Chemical Hazard Prediction, 1977.

## APPENDIX F

DISTRIBUTION LIST Copies Director National Oceanic & Atmospheric Adminstration Environmental Research Laboratories Boulder, CO 80302 Cooperative Institute for Research In Environmental Sciences (CIRES) ATTN: Dr. John C. Wyngaard University of Colorado Boulder, CO 80309 Director, National Oceanic & Atmospheric Administration Technical Processes Branch, D823 Room 806, Libraries Division 8060 13th Street Silver Spring, MD 20910 Director National Oceanic & Atmospheric Administration National Oceanographic Data Center, D722
Rockville, MD 20852 NASA Scientific and Technical Information Facility ATTN: Acquisitions Branch (S-AK/DL) P. O. Box 33 College Park, MD 20740 Environmental Protection Agency Division of Meteorology Research Triangle Park, NC 27711

National Aeronautics and Space Administration 1 Director of Meteorological Systems Office of Applications (FM) Washington, DC 20546 Chief Environmental Data Service Atmospheric Sciences Library Grammax Building ATTN: D821 Silver Spring, MD 20910 Commander U.S. Army White Sands Missile Range ATTN: STEWS-TE-ER Technical Library White Sands Missile Range, NM 88002

Director, Meteorology Department Pennsylvania State University University Station, PA 16802	Copies 1
Air Resources Laboratory National Oceanic and Atmospheric Administration ATTN: C. R. Dickson Idaho Falls, Idaho 83401	est festesian) ind acts, at 1. catego them somethis of full menor that
Air Force Geophysics Laboratory ATTN: Yutaka Izumi Hanscom AFB Bedford, MA 01731	3
Director Defense Nuclear Agency ATTN: Tech Library Washington, D.C. 20305	treally our most sample 1 or 1998 W. portract would
Head, Atmospheric Research Section National Science Foundation 1800 G. Street, NW Washington, D.C. 20550	fraedy Court for the form of t
Commander U.S. Army Electronics Command ATTN: DRSEL-CT-S (Dr. Swingle) Fort Monmouth, NJ 07703	a frequency date  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a  1 g a
Wave Propagation Laboratory ATTN: ERL/NOAA (Dr. Duane Haugen) Boulder, CO 80302	response in the control of the contr
National Center for Atmos Res NCAR Library PO Box 3000 Boulder, CO 80303	Parent
Head, Rsch and Development Div (ESA-131) Meteorological Department Naval Weapons Engineering Support Act Washington, DC 20374	nemospher to Science Array and letting Array (NRT) Science Array (NRT) Science Array (NRT) Science Array (NRT)
HQDA (DAEN-RDM/Dr. De Percin) Forrestal Bldg Washington, DC 20314	

1

P

	Copies
Director Western Regional Headquarters	\$100pter201
National Weather Service	
P.O. Box 11188, Federal Building	
Salt Lake City, UT 84111	
Director	1
U.S. Army Engineer Waterways Experiment Station	
ATTN: WES-FV Vicksburg, MS 39181	
The second secon	
Director	1
National Sciences Foundation Atmospheric Sciences Programs	
Washington, DC 20550	
Meteorology Department	1
University of Utah Salt Lake City, UT 84116	
Sail Lake City, or 64116	
U.S. Department of Agriculture	1
Forest Service	
Pacific Southwest Forest and Land Experiment Station ATTN: Mr. Jerry R. Reid	
1960 Addison Street, P.O. Box 245	
Berkeley, CA 94701	
The Research Corporation of New England	CONTRACTOR
ATTN: Mr. Donald L. Shearer	(2) 中的域。中的表示
125 Silas Deane Highway Wethersfield, CT 06109	
wethersheld, the bolos	
Battelle Northwest Laboratories	1
ATTN: Dr. Larry L. Wendell Bldg 622R, 200 West Area	
Richland, WA 99352	
Traismont the	med Constant
Administrator Defense Documentation Center	12
Cameron Station	
Alexandria, VA 22314	
H. E. Cramer Co, Inc	SE SEEDER TO SEE
P.O. Box 8049	Consultation of the
Salt Lake City, Utah 84108	

\*

4

1

1

Commander	Copies
US Army Test and Evaluation Command ATTN: AMSTE-TO-0 (Mr. Robert Gibson) Aberdeen Proving Ground, MD 21005	
Technical Support Directorate ATTN: Technical Library Bldg 3330, Edgewood Arsenal MD 21010	1
Illinois State Water Survey Urbana, IL 61801	1
Los Alamos Scientific Laboratory University of California Los Alamos, NM 87544	1 30 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Systems Applications, Inc. ATTN: Dr. Robert G. Lamb San Rafael, CA 97902	1
Atmospheric Turbulence and Diffusion Laboratory ATTN: NOAA (Mr. Steven R. Hanna) Oak Ridge, TN 37830	1
Tennessee Valley Authority Air-Quality Branch ATTN: Mr. Jack Leavitt Muscle Shoals, AL 35660	1
Department of Meteorology University of Wisconsin Milwaukee, WI 53201	1
Brookhaven National Laboratories Upton, NY 11973	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Lawrence Livermore Laboratory Livermore, CA 94550	northy a
The Library of Congress ATTN: Exchange & Gift Div Washington, DC 20540	2
NOAA Weather Service Nuclear Spt Ofc ATTN: Mr. R. W. Titus P. O. Box 14985 Las Vegas, NV 89114	0700 x0 800 10 259,

	Copies
SAMTEC - WE ATTN: Mr. R. W. Lenhard Vandenberg AFB, CA 93437	1
Department of Atmospheric Science University of Washington Seattle, WA 98195	1
Commander U.S. Air Force Environmental Technical Applications Center Scott Air Force Base, IL 62225	1
RACIC, Battelle Memorial Institute Columbus Laboratories 505 King Avenue Columbus, OH 43201	1.
Commander U.S. Army Dugway Proving Ground Dugway, UT 84022 STEDP-SC STEDP-MT-DA-M STEDP-MT-DA-L STEDP-MT-DA	1 5 1 2